

Computer Applications

Subject Code - 165

CLASS IX (2025-26)

Learning Outcomes

After the completion of the course, the student will be able to:

1. Familiarise themselves with the fundamental components and functions of computer systems, memory, storage devices, and I/O devices.
2. Develop an understanding of various types of software, computer networks, and multimedia.
3. Understand the importance of Safe Internet Practices
4. Create and edit documents, spread sheets, and presentations.
5. Perform basic data manipulation using spread sheets.
6. Animate text and pictures using presentation tool

Distribution of Marks and Periods

Unit No.	Unit Name	Marks
1.	Basics of Information Technology	20
2.	Cyber safety	15
3.	Office Tools	15
4.	Lab Exercises	50
	Total	100

Unit 1: Basics of Information Technology

- Computer Systems: characteristics of a computer, components of a computer system – CPU, memory, storage devices and I/O devices
- Memory: primary (RAM and ROM) and secondary memory
- Storage devices: hard disk, CD ROM, DVD, pen/flash drive, memory stick
- I/O devices: keyboard, mouse, monitor, printer, scanner, web camera
- Types of software: system software (operating system, device drivers), application software including mobile applications
- Computer networking: Type of networks: PAN, LAN, MAN, WAN, wired/wireless communication, Wi-Fi, Bluetooth, cloud computers (Private/public)
- Multimedia: images, audio, video, animation

Unit 2 : Cyber-safety

Safely browsing the web and using social networks: identity protection, proper usage of passwords, privacy, confidentiality of information, cyber stalking, reporting cybercrimes

- Malware: Viruses, adware

Unit 3: Office tools

- Introduction to a word processor: create and save a document.
- Edit and format text: text style (B, I, U), font type, font size, text colour, alignment of text. Format paragraphs with line and/or paragraph spacing. Add headers and footers, numbering pages, grammar and spell check utilities, subscript and superscript, insert symbols, use print preview, and print a document.
- Insert pictures, change the page setting, add bullets and numbering, borders and shading, and insert tables – insert/delete rows and columns, merge and split cells.
- Use auto-format, track changes, review comments, use of drawing tools, shapes and mathematical symbols.
- Presentation tool: understand the concept of slide shows, basic elements of a slide, different types of slide layouts, create and save a presentation, and learn about the different views of a slide set – normal view, slide sorter view and handouts.
- Edit and format a slide: add titles, subtitles, text, background, and watermark, headers and footers, and slide numbers.
- Insert pictures from files, create animations, add sound effects, and rehearse timings.
- Spreadsheets: concept of a worksheet and a workbook, create and save a worksheet.
- Working with a spreadsheet: enter numbers, text, date/time, series using auto fill; edit and format a worksheet including changing the colour, size, font, alignment of text; insert and delete cells, rows and columns. Enter a formula using the operators (+, -, *, /), refer to cells, and print a worksheet.
- Use simple statistical functions: SUM (), AVERAGE (), MAX (), MIN (), IF () (without compound statements); embed charts of various types: line, pie, scatter, bar and area in a worksheet.

4. Lab Exercises

- Browser settings for a secure connection
- Working with the operating system: Navigation of the file system using a mouse and keyboard.
- Word processing: create a text document; create a letter, report, and greeting card.
- Create a text document with figures in it. It should describe a concept taught in another course.
- Discuss the following in a text document about the basic organisation of a computer: CPU, memory, input/output devices, hard disk.
- Create a text document in an Indian language other than English.
- Create a presentation.
- Create a presentation with animation.
- Include existing images/ pictures in a presentation.
- Animate pictures and text with sound effects in a presentation
- Create a simple spreadsheet and perform the following operations: min, max, sum, and average.
- Create different types of charts using a spreadsheet: line, bar, area and pie.

Breakup of marks for the Practicals:

S.No.	Unit Name	Marks
1.	Lab Test (30 marks)	
	Word processing	10
	Handling spreadsheets	10
	Creating presentations	10
2.	Report File + viva (10 marks)	
	Report file:-- 4 documents each with a word processor, spreadsheet, and presentation tool	8
	Viva voce (based on the report file)	2
3.	Project (that uses most of the concepts that have been learnt) (10 marks)	
	Total Marks	50

ENGLISH LANGUAGE AND LITERATURE
Subject Code-184
Classes-IX-X (2025-26)

1. Background

At the secondary stage of English language learning the textual materials and other resources should represent a wide range of learning experience. Literature has always played a significant role in learning language. However, it is felt that pupils should be apprised with contemporary issues, read authentic literature and experiences of people to reflect and build their personality traits.

While there is a trend for inclusion of a wider range of contemporary and authentic texts, accessible and culturally appropriate pieces of literature should play a pivotal role at the secondary stage of education. The English class is meant for reading literature from different perspectives and to engage in activities for developing communicative competence, creativity and enrichment of language skills. It should not be seen as a place merely to read poems and stories in, but an area of activities to develop the learner's imagination as a major aim of language study, and to equip the learner with communicative skills to perform various language functions through speech and writing.

2. Objectives:

Objectives of the course are to enable learners to:

- build greater confidence and proficiency in oral and written communication
- develop the ability and knowledge required in order to engage in independent reflection and inquiry
- make appropriate usage of English language both written and oral
- communicate in various social settings and express agreement and disagreement with logic.
- equip learners with essential language skills to question and to articulate their point of view and arrive at conclusion through discussion and debate.
- build competence in the different aspects of the Language
- develop sensitivity to, and appreciation of world literature representing varieties of English and cultures embedded in it.
- enable the learner to access knowledge and information through reference skills (consulting a dictionary / thesaurus, library, internet, etc.)
- develop curiosity and creativity through extensive reading of literature from different time periods.

- facilitate self-learning to enable them to become independent learners
- review, organise and edit their own work and work done by peers
- give a brief oral description of events / incidents of topical interest and for real life situations.
- retell the contents of authentic audio texts (weather reports, public announcements, simple advertisements, short interviews, etc.)
- participate in conversations, discussions, etc., on topics of mutual interest in non-classroom situations
- narrate a story which has been depicted pictorially or in any other non-verbal mode
- respond, in writing, to business letters, official communications email etc.
- read and identify the main points / significant details of texts like scripts of audio-video interviews, discussions, debates, etc.
- write without prior preparation on a given topic and be able to defend or explain the stand taken / views expressed in the form of article, speech, or a debate
- write a summary of short lectures on familiar topics by making / taking notes
- write an assessment of different points of views expressed in a discussion / debate
- read poems effectively (with proper rhythm and intonation) and understands literary devices.
- transcode information from a graph / chart to a description / report and write a dialogue, short story or report
- develop appreciation for Indian languages (multilingualism), and Indian Literature.

3. Language Items

In addition to consolidating the grammatical items practised earlier, the courses at the secondary level seek to reinforce the following explicitly:

- sequence of tenses
- reported speech in extended texts
- modal auxiliaries (those not covered at upper primary)
- non-finites (infinitives, gerunds, participles)
- conditional clauses
- complex and compound sentences
- phrasal verbs and prepositional phrases
- cohesive devices
- punctuation (semicolon, colon, dash, hyphen, parenthesis or use of brackets and exclamation mark)

4. Methods and Techniques

The methodology is based on a multi-skill, activity-based, learner-centered approach. Care is taken to fulfill the functional (communicative), literary (aesthetic) and cultural (sociological) needs of the learner. In this situation, the teacher is the facilitator of learning, She/he presents language items, create situations which motivates the child to use English for the purposes of communication and expression. Aural-oral teaching and testing is an integral feature of the teaching-learning process. The electronic and print media could be used extensively. A few suggested activities are:

- Role play
- Simulating real life situations
- Dramatising and miming
- Problem solving and decision making
- Interpreting information given in tabular form and schedule
- Using newspaper clippings as a resource for comprehending and analysing issues.
- Borrowing situations and registers from the world around the learners, from books and from other disciplines
- Using language games, riddles, puzzles and jokes
- Interpreting pictures / sketches / cartoons
- Debating and discussing
- Narrating and discussing stories, anecdotes, etc.
- Reciting poems
- Working in pairs and groups
- Using media inputs - computer, television, video cassettes, tapes, software packages

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

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

Section A

Reading Skills

I. Reading Comprehension through Unseen Passage **20 Marks**

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

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

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

Section B

Writing Skills and Grammar

II. Grammar **10 Marks**

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

III. Writing Skills **10 marks**

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

Section C
Language through Literature

40 Marks

IV. Reference to the Context

5+5 = 10 Marks

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

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

V. Short & Long Answer Questions

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

Prescribed Books: Published by NCERT, New Delhi

1.BEEHIVE

Prose

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

Poems

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

2. MOMENTS

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

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

NOTE: Teachers are suggested to:

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

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

INTERNAL ASSESSMENT

Listening and Speaking

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

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

Art-integrated projects based on activities like Role Play, Skit, Dramatization etc. must be used. Please refer to the Circular no. Acad-33/2020 dated 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 – IX (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 justifying. Extract relevant information, identifying the central theme and sub-theme, understanding the writers' message and writing fluently.	40
Total		80
<p>For the details of Internal Assessment of 20 marks, please refer to the circular no. Acad-11/2019, dated March 06, 2019.</p>		

हिंदी मातृभाषा

विषय कोड - 002

कक्षा 9वीं-10वीं (2025-26)

राष्ट्रीय शिक्षा नीति 2020 तथा केंद्रीय माध्यमिक शिक्षा बोर्ड द्वारा समय-समय पर दक्षता आधारित शिक्षा, कला समेकित अधिगम, अनुभवात्मक अधिगम को अपनाने की बात की गई है, जो शिक्षार्थियों की प्रतिभा को उजागर करने, खेल-खेल में सीखने पर बल देने, आनंदपूर्ण ज्ञानार्जन और विद्यार्जन के विविध तरीकों को अपनाने तथा अनुभव के द्वारा सीखने पर बल देती है।

दक्षता आधारित शिक्षा से तात्पर्य है- सीखने और मूल्यांकन करने का एक ऐसा दृष्टिकोण, जो शिक्षार्थी के सीखने के प्रतिफल और विषय में विशेष दक्षता को प्राप्त करने पर बल देता है। दक्षता वह क्षमता, कौशल, ज्ञान और दृष्टिकोण है, जो व्यक्ति को वास्तविक जीवन में कार्य करने में सहायता करती है। इससे शिक्षार्थी यह सीख सकते हैं कि ज्ञान और कौशल को किस प्रकार प्राप्त किया जाए तथा उन्हें वास्तविक जीवन की समस्याओं पर कैसे लागू किया जाए। जीवनोपयोगी बनाना तथा वास्तविक जीवन के अनुभवों से पाठ को समृद्ध करना, ही दक्षता आधारित शिक्षा है। इसके लिए उच्च स्तरीय चिंतन कौशल पर विशेष बल देने की आवश्यकता है।

कला समेकित अधिगम को शिक्षण-अधिगम प्रक्रिया में सुनिश्चित करना अत्यधिक आवश्यक है। कला के संसार में कल्पना की एक अलग ही उड़ान होती है। कला एक व्यक्ति की रचनात्मक अभिव्यक्ति है। कला समेकित अधिगम से तात्पर्य है- कला के विविध रूपों संगीत, नृत्य, नाटक, कविता, रंगशाला, यात्रा, मूर्तिकला, आभूषण बनाना, गीत लिखना, नुक्कड़ नाटक, कोलाज, पोस्टर, कला प्रदर्शनी को शिक्षण अधिगम की प्रक्रिया का अभिन्न हिस्सा बनाना। किसी विषय को आरंभ करने के लिए आइस ब्रेकिंग गतिविधि के रूप में तथा सामंजस्यपूर्ण समझ पैदा करने के लिए अंतरविषयक या बहुविषयक परियोजनाओं के रूप में कला समेकित अधिगम का प्रयोग किया जाना चाहिए। इससे पाठ अधिक रोचक एवं ग्राह्य हो जाएगा।

अनुभवात्मक अधिगम या आनुभविक ज्ञानार्जन का उद्देश्य शैक्षिक वातावरण को शिक्षार्थी केंद्रित बनाने के साथ-साथ स्वयं मूल्यांकन करने, आलोचनात्मक रूप से सोचने, निर्णय लेने तथा ज्ञान का निर्माण कर उसमें पारंगत होने से है। यहाँ शिक्षक की भूमिका सुविधा प्रदाता व प्रेक्षक की रहती है। ज्ञानार्जन-अनुभाविक ज्ञानार्जन, सहयोगात्मक तथा स्वतंत्र रूप से होता है और यह शिक्षार्थियों को एक साथ कार्य करने तथा स्वयं के अनुभव द्वारा सीखने पर बल देता है। यह सिद्धांत और व्यवहार के बीच की दूरी को कम करता है।

माध्यमिक स्तर तक आते-आते विद्यार्थी किशोर हो चुका होता है और उसमें सुनने, बोलने, पढ़ने, लिखने के साथ-साथ आलोचनात्मक दृष्टि विकसित होने लगती है। भाषा के सौंदर्यात्मक पक्ष, कथात्मकता/गीतात्मकता, दृश्य-श्रव्य और प्रिंट की भाषा की समझ, शब्द शक्तियों की समझ, राजनैतिक एवं सामाजिक चेतना का विकास, स्वयं की अस्मिता का संदर्भ और आवश्यकता के अनुसार उपयुक्त भाषा-प्रयोग, शब्दों का सुचितित प्रयोग, भाषा की नियमबद्ध प्रकृति आदि से विद्यार्थी परिचित हो जाता है। इतना ही नहीं, वह विविध विधाओं और अभिव्यक्ति की अनेक शैलियों से भी परिचित हो चुका होता है। अब विद्यार्थी की दृष्टि आस-पड़ोस, राज्य-देश की सीमा को लाँघते हुए वैश्विक क्षितिज तक फैल जाती है।

इन बच्चों की दुनिया में समाचार, खेल, फ़िल्म तथा अन्य कलाओं के साथ-साथ पत्र-पत्रिकाएँ और अलग-अलग तरह की किताबें भी प्रवेश पा चुकी होती हैं।

इस स्तर पर मातृभाषा हिंदी का अध्ययन साहित्यिक, सांस्कृतिक और व्यावहारिक भाषा के रूप में कुछ इस तरह से हो कि उच्चतर माध्यमिक स्तर पर पहुँचते-पहुँचते यह विद्यार्थियों की पहचान, आत्मविश्वास और विमर्श की भाषा बन सके। प्रयास यह भी हो कि विद्यार्थी भाषा के लिखित प्रयोग के साथ-साथ सहज और स्वाभाविक मौखिक अभिव्यक्ति में भी सक्षम हो सके।

इस पाठ्यक्रम के अध्ययन से –

- (क) विद्यार्थी अगले स्तरों पर अपनी रुचि और आवश्यकता के अनुरूप हिंदी की पढ़ाई कर सकेंगे तथा हिंदी में बोलने और लिखने में सक्षम हो सकेंगे।
- (ख) अपनी भाषा दक्षता के चलते उच्चतर माध्यमिक स्तर पर विज्ञान, समाज विज्ञान और अन्य के साथ सहज संबद्धता (अंतर्संबंध) स्थापित कर सकेंगे।
- (ग) दैनिक जीवन व्यवहार के विविध क्षेत्रों में हिंदी के औपचारिक/अनौपचारिक उपयोग की दक्षता हासिल कर सकेंगे।
- (घ) भाषा प्रयोग के परंपरागत तौर-तरीकों एवं विधाओं की जानकारी एवं उनके समसामयिक संदर्भों की समझ विकसित कर सकेंगे।
- (ङ) हिंदी भाषा में दक्षता का इस्तेमाल वे अन्य भाषा-संरचनाओं की समझ विकसित करने के लिए कर सकेंगे।

दृश्य-श्रव्य, मल्टी मीडिया तथा विविध प्रिंट माध्यमों से प्रसारित सूचनाओं को समझना विश्लेषित करना और संप्रेषित कर सकेंगे।

- कक्षा आठवीं तक अर्जित भाषिक कौशलों (सुनना, बोलना, पढ़ना और लिखना) का उत्तरोत्तर विकास।
- सृजनात्मक साहित्य के आलोचनात्मक आस्वाद की क्षमता का विकास।
- स्वतंत्र और मौखिक रूप से अपने विचारों की अभिव्यक्ति का विकास।
- ज्ञान के विभिन्न अनुशासनों के विमर्श की भाषा के रूप में हिंदी की विशिष्ट प्रकृति एवं क्षमता का बोध कराना।
- साहित्य की प्रभावकारी क्षमता का उपयोग करते हुए सभी प्रकार की विविधताओं (राष्ट्रीयता, धर्म, जाति, लिंग एवं भाषा) के प्रति सकारात्मक और संवेदनशील आचार-विचार का विकास।
- भारतीय भाषाओं एवं विदेशी भाषाओं की सांस्कृतिक विविधता से परिचय।
- व्यावहारिक और दैनिक जीवन में विविध अभिव्यक्तियों की मौखिक व लिखित क्षमता का विकास।
- संचार माध्यमों (प्रिंट और इलेक्ट्रॉनिक) में प्रयुक्त हिंदी की प्रकृति से अवगत कराना और नवीन भाषा प्रयोग करने की क्षमता से परिचय। (मल्टीमीडिया, सोशल मीडिया, पौडकास्ट, ब्लॉग)
- विश्लेषण और तर्क क्षमता का विकास।
- भावाभिव्यक्ति क्षमताओं का उत्तरोत्तर विकास।

- मतभेद, विरोध और टकराव की परिस्थितियों में भी भाषा को संवेदनशील और तर्कपूर्ण इस्तेमाल से शांतिपूर्ण संवाद की क्षमता का विकास।
- भाषा की समावेशी और बहुभाषिक प्रकृति की समझ और व्यवहार का विकास करना।

शिक्षण युक्तियाँ

माध्यमिक कक्षाओं में अध्यापक की भूमिका उचित वातावरण के निर्माण में सहायक होनी चाहिए। भाषा और साहित्य की पढ़ाई में इस बात पर ध्यान देने की ज़रूरत होगी कि -

- विद्यार्थी द्वारा की जा रही गलतियों को भाषा के विकास के अनिवार्य चरण के रूप में स्वीकार किया जाना चाहिए, जिससे विद्यार्थी अबाध रूप से बिना झिझक के लिखित और मौखिक अभिव्यक्ति करने में उत्साह का अनुभव करें। विद्यार्थियों पर शुद्धि का ऐसा दबाव नहीं होना चाहिए कि वे तनाव महसूस करने लगें। उन्हें भाषा के सहज, कारगर और रचनात्मक रूपों से इस तरह परिचित कराना उचित है कि वे स्वयं, सहज रूप से भाषिक योग्यताओं का विकास कर सकें।
- विद्यार्थी स्वतंत्र और अबाध रूप से लिखित और मौखिक अभिव्यक्ति करें। अधिगम बाधित होने पर अध्यापक, अध्यापन शैली में परिवर्तन करें।
- ऐसे शिक्षण-बिंदुओं की पहचान की जाए, जिनसे कक्षा में विद्यार्थी निरंतर सक्रिय भागीदारी करें और अध्यापक भी इस प्रक्रिया में उनके साथी बनें।
- हर भाषा का अपना व्याकरण होता है। भाषा की इस प्रकृति की पहचान कराने में परिवेशगत और पाठगत संदर्भों का प्रयोग करना चाहिए। यह पूरी प्रक्रिया ऐसी होनी चाहिए कि विद्यार्थी स्वयं को शोधकर्ता समझें तथा अध्यापक इसमें केवल निर्देशन करें।
- हिंदी में क्षेत्रीय प्रयोगों, अन्य भाषाओं के प्रयोगों के उदाहरण से यह बात स्पष्ट की जानी चाहिए कि ये प्रयोग विभेदीकरण नहीं उत्पन्न करते हैं, बल्कि लिपि भाषा के समावेशी स्वरूप को पुष्ट करते हैं और उसका परिवेश अनिवार्य रूप से बहुभाषिक होता है।
- भिन्न क्षमता वाले विद्यार्थियों के लिए उपयुक्त शिक्षण-सामग्री का इस्तेमाल किया जाए तथा किसी भी प्रकार से उन्हें अन्य विद्यार्थियों से कमतर या अलग न समझा जाए।
- कक्षा में अध्यापक को हर प्रकार की विविधताओं (लिंग, जाति, वर्ग, धर्म आदि) के प्रति सकारात्मक और संवेदनशील वातावरण निर्मित करना चाहिए।
- काव्य भाषा के मर्म से विद्यार्थी का परिचय कराने के लिए ज़रूरी होगा कि किताबों में आए काव्यांशों की लयबद्ध प्रस्तुतियों के ऑडियो-वीडियो कैसेट तैयार किए जाएँ। अगर आसानी से कोई गायक/गायिका मिले तो कक्षा में मध्यकालीन साहित्य के अध्यापन-शिक्षण में उससे मदद ली जानी चाहिए।

- रा.शै.अ. और प्र.प.,(एन.सी.ई.आर.टी.) द्वारा उपलब्ध कराए गए अधिगम प्रतिफल/सीखने-सिखाने की प्रक्रिया जो इस पाठ्यचर्या के साथ संलग्नक के रूप में उपलब्ध है, को शिक्षक द्वारा दक्षता आधारित शिक्षा का लक्ष्य प्राप्त करने के लिये अनिवार्य रूप से इस्तेमाल करने की आवश्यकता है।
- शिक्षा मंत्रालय के विभिन्न संगठनों तथा स्वतंत्र निर्माताओं द्वारा उपलब्ध कराए गए अन्य कार्यक्रम/ई-सामग्री वृत्तचित्रों और फ़ीचर फ़िल्मों को शिक्षण-सामग्री के तौर पर इस्तेमाल करने की ज़रूरत है। इनके प्रदर्शन के क्रम में इन पर लगातार बातचीत के ज़रिए सिनेमा के माध्यम से भाषा के प्रयोग की विशिष्टता की पहचान कराई जा सकती है और हिंदी की अलग-अलग छटा दिखाई जा सकती है।
- कक्षा में सिर्फ़ पाठ्यपुस्तक की उपस्थिति से बेहतर होगा कि शिक्षक के हाथ में तरह-तरह की पाठ्यसामग्री को विद्यार्थी देखें और कक्षा में अलग-अलग मौकों पर शिक्षक उनका इस्तेमाल करें।
- भाषा लगातार ग्रहण करने की क्रिया में बनती है, इसे प्रदर्शित करने का एक तरीका यह भी है कि शिक्षक खुद यह सिखा सकें कि वे भी शब्दकोश, साहित्यकोश, संदर्भग्रंथ की लगातार मदद ले रहे हैं। इससे विद्यार्थियों में इनके इस्तेमाल करने को लेकर तत्परता बढ़ेगी। अनुमान के आधार पर निकटतम अर्थ तक पहुँचकर संतुष्ट होने की जगह वे सटीक अर्थ की खोज करने के लिए प्रेरित होंगे। इससे शब्दों की अलग-अलग रंगत का पता चलेगा, वे शब्दों के सूक्ष्म अंतर के प्रति और सजग हो पाएँगे।

श्रवण व वाचन (मौखिक बोलना) संबंधी योग्यताएँ

श्रवण (सुनना) कौशल

- वर्णित या पठित सामग्री, वार्ता, भाषण, परिचर्चा, वार्तालाप, वाद-विवाद, कविता-पाठ आदि को सुनकर अर्थ ग्रहण करना, विश्लेषित मूल्यांकन करना और अभिव्यक्ति के ढंग को जानना।
- वक्तव्य के भाव, विनोद व उसमें निहित संदेश, व्यंग्य आदि को समझना।
- वैचारिक मतभेद होने पर भी वक्ता की बात को ध्यानपूर्वक, धैर्यपूर्वक व शिष्टाचार के साथ सुनना व वक्ता के दृष्टिकोण को समझना।
- ज्ञानार्जन मनोरंजन व प्रेरणा ग्रहण करने हेतु सुनना।
- वक्तव्य का आलोचनात्मक विश्लेषण करना एवं सुनकर उसका सार ग्रहण करना।

श्रवण (सुनना) वाचन (बोलना) का परीक्षण : कुल 5 अंक (2.5+2.5)

- परीक्षक किसी प्रासंगिक विषय पर एक अनुच्छेद का स्पष्ट वाचन करेगा। अनुच्छेद तथ्यात्मक या सुझावात्मक हो सकता है। अनुच्छेद लगभग 100-150 शब्दों का होना चाहिए।

या

परीक्षक 1-2 मिनट का श्रव्य अंश (ऑडियो क्लिप) सुनवाएगा। अंश रोचक होना चाहिए। कथ्य/घटनापूर्ण एवं स्पष्ट होना चाहिए। वाचक का उच्चारण शुद्ध, स्पष्ट एवं विराम चिह्नों के उचित प्रयोग सहित होना चाहिए।

- परीक्षार्थी ध्यानपूर्वक परीक्षा/ ऑडियो क्लिप को सुनने के पश्चात परीक्षक द्वारा पूछे गए प्रश्नों का अपनी समझ से मौखिक उत्तर देंगे।

कौशलों के मूल्यांकन का आधार

	श्रवण		वाचन
1	विद्यार्थी में परिचित संदर्भों में प्रयुक्त शब्दों और पदों को समझने की सामान्य योग्यता है।	1	विद्यार्थी केवल अलग-अलग शब्दों और पदों के प्रयोग की योग्यता प्रदर्शित करता है।
2	छोटे सुसंबद्ध कथनों को परिचित संदर्भों में समझने की योग्यता है।	2	परिचित संदर्भों में शुद्धता से केवल छोटे सुसंबद्ध कथनों का सीमित प्रयोग करता है।
3	परिचित या अपरिचित दोनों संदर्भों में कथित सूचना को स्पष्ट समझने की योग्यता है।	3	अपेक्षित दीर्घ भाषण में जटिल कथनों के प्रयोग की योग्यता प्रदर्शित करता है।
4	दीर्घ कथनों को पर्याप्त शुद्धता से समझता है और निष्कर्ष निकाल सकता है।	4	अपरिचित स्थितियों में विचारों को तार्किक ढंग से संगठित कर धाराप्रवाह रूप में प्रस्तुत कर सकता है।
5	जटिल कथनों के विचार-बिंदुओं को समझने और विश्लेषित करने की योग्यता प्रदर्शित करता है।	5	उद्देश्य और श्रोता के लिए उपयुक्त शैली को अपना सकता है।

टिप्पणी

- परीक्षण से पूर्व परीक्षार्थी को तैयारी के लिए कुछ समय दिया जाए।
- विवरणात्मक भाषा में विषय के अनुकूल तीनों कालों का प्रयोग अपेक्षित है।
- निर्धारित विषय परीक्षार्थी के अनुभव संसार के हों, जैसे - कोई चुटकुला या हास्य-प्रसंग सुनाना, हाल में पढ़ी पुस्तक या देखे गए सिनेमा की कहानी सुनाना।
- शिक्षार्थी को विषय केंद्रित स्वतंत्र अभिव्यक्ति करने का अवसर प्रदान करें।

पठन कौशल

- सरसरी दृष्टि से पढ़कर पाठ का केंद्रीय विचार ग्रहण करना।
- एकाग्रचित हो एक अभीष्ट गति के साथ मौन पठन करना।
- पठित सामग्री पर अपनी प्रतिक्रिया व्यक्त करना।
- भाषा, विचार एवं शैली की सराहना करना।
- साहित्य के प्रति अभिरुचि का विकास करना।
- साहित्य की विभिन्न विधाओं की प्रकृति के अनुसार पठन कौशल का विकास।
- संदर्भ के अनुसार शब्दों के अर्थ-भेदों की पहचान करना।

- सक्रिय (व्यवहारोपयोगी) शब्द भंडार की वृद्धि करना।
- पठित सामग्री के विभिन्न अंशों का परस्पर संबंध समझना।
- पठित अनुच्छेदों के शीर्षक एवं उपशीर्षक देना।
- कविता के प्रमुख उपादान यथा - तुक, लय, यति, गति, बलाघात आदि से परिचित कराना।

लेखन कौशल

- लिपि के मान्य रूप का ही व्यवहार करना।
- विराम-चिह्नों का उपयुक्त प्रयोग करना।
- प्रभावपूर्ण भाषा तथा लेखन-शैली का स्वाभाविक रूप से प्रयोग करना।
- उपयुक्त अनुच्छेदों में बाँटकर लिखना।
- प्रार्थना पत्र, निमंत्रण पत्र, बधाई पत्र, संवेदना पत्र, ई-मेल, आदेश पत्र, एस.एम.एस आदि लिखना और विविध प्रपत्रों को भरना।
- विविध स्रोतों से आवश्यक सामग्री एकत्र कर अभीष्ट विषय पर निबंध लिखना।
- देखी हुई घटनाओं का वर्णन करना और उन पर अपनी प्रतिक्रिया देना।
- हिंदी की एक विधा से दूसरी विधा में रूपांतरण का कौशल।
- समारोह और गोष्ठियों की सूचना और प्रतिवेदन तैयार करना।
- सार, संक्षेपीकरण एवं भावार्थ लिखना।
- गद्य एवं पद्य अवतरणों की व्याख्या लिखना।
- स्वानुभूत विचारों और भावनाओं को स्पष्ट सहज और प्रभावशाली ढंग से अभिव्यक्त करना।
- क्रमबद्धता और प्रकरण की एकता बनाए रखना।
- लिखने में सृजनात्मकता लाना।
- अनावश्यक काट-छाँट से बचते हुए सुपाठ्य लेखन कार्य करना
- दो भिन्न पाठों की पाठ्यवस्तु पर चिंतन करके उनके मध्य की संबद्धता (अंतर्संबंधों) पर अपने विचार अभिव्यक्त करने में सक्षम होना।
- रटे-रटाए वाक्यों के स्थान पर अभिव्यक्तिपरक/ स्थिति आधारित/ उच्च चिंतन क्षमता वाले प्रश्नों पर सहजता से अपने मौलिक विचार प्रकट करना।

रचनात्मक अभिव्यक्ति

अनुच्छेद लेखन

- **पूर्णता** – संबंधित विषय के सभी पक्षों को अनुच्छेद के सीमित आकार में संयोजित करना
- **क्रमबद्धता**– विचारों को क्रमबद्ध एवं तर्कसंगत विधि से प्रकट करना
- **विषय-केंद्रित** – प्रारंभ से अंत तक अनुच्छेद का एक सूत्र में बँधा होना

- **सामासिकता** – अनावश्यक विस्तार न देकर सीमित शब्दों में यथासंभव विषय से संबद्ध पूरी बात कहने का प्रयास करना

पत्र लेखन

- अनौपचारिक पत्र विचार-विमर्श का ज़रिया, जिनमें मैत्रीपूर्ण भावना निहित, सरलता, संक्षिप्त और सादगी से भरी लेखन शैली
- औपचारिक पत्रों द्वारा दैनिक जीवन की विभिन्न स्थितियों में कार्य, व्यापार, संवाद, परामर्श, अनुरोध तथा सुझाव के लिए प्रभावी एवं स्पष्ट संप्रेषण क्षमता का विकास
- सरल और बोलचाल की भाषा शैली, उपयुक्त, सटीक शब्दों के प्रयोग, सीधे-सादे ढंग से विषय की स्पष्ट और प्रत्यक्ष प्रस्तुति
- प्रारूप की आवश्यक औपचारिकताओं के साथ सुस्पष्ट, सुलझे और क्रमबद्ध विचार आवश्यक; तथ्य, संक्षिप्तता और संपूर्णता के साथ प्रभावी प्रस्तुति

विज्ञापन लेखन

(विज्ञापित वस्तु / विषय को केंद्र में रखते हुए)

- विज्ञापित वस्तु के विशिष्ट गुणों का उल्लेख
- आकर्षक लेखन शैली
- प्रस्तुति में नयापन, वर्तमान से जुड़ाव तथा दूसरों से भिन्नता
- विज्ञापन में आवश्यकतानुसार नारे (स्लोगन) का उपयोग
- विज्ञापन लेखन में बॉक्स, चित्र अथवा रंग का उपयोग अनिवार्य नहीं है, किंतु समय होने पर प्रस्तुति को प्रभावी बनाने के लिए इनका उपयोग किया जा सकता है।

संवाद लेखन

(दी गई परिस्थितियों के आधार पर संवाद लेखन)

- सीमा के भीतर एक दूसरे से जुड़े सार्थक और उद्देश्यपूर्ण संवाद
- पात्रों के अनुकूल भाषा शैली
- कोष्ठक में वक्ता के हाव-भाव का संकेत
- संवाद लेखन के अंत तक विषय/मुद्दे पर वार्ता पूरी

लघुकथा लेखन

(दिए गए विषय/शीर्षक आदि के आधार पर रचनात्मक सोच के साथ लघुकथा लेखन)

- कथात्मकता
- निरंतरता, जिज्ञासा/रोचकता/कल्पनाशीलता
- प्रभावी संवाद/ पात्रानुकूल संवाद

- रचनात्मकता/
- उद्देश्यपरकता

संदेश लेखन

(शुभकामना, पर्व-त्योहारों एवं विशेष अवसरों पर दिए जाने वाले संदेश)

- विषय से संबद्धता
- संक्षिप्त और सारगर्भित
- भाषाई दक्षता एवं प्रस्तुति
- रचनात्मकता/सृजनात्मकता
- विषय के अनुकूल काव्य-पंक्तियों का आंशिक उपयोग, किंतु इसकी अनिवार्यता नहीं

ई-मेल लेखन

(विविध विषयों पर आधारित औपचारिक ई-मेल लेखन)

- बोधगम्य भाषा
- विषय से संबद्धता
- संक्षिप्त, स्पष्ट व सारगर्भित
- शिष्टाचार व औपचारिकताओं का निर्वाह

स्ववृत्त लेखन

(उपलब्ध रिक्ति के लिए स्ववृत्त लेखन)

- स्पष्ट, संपूर्ण व व्यवस्थित
- नाम, जन्मतिथि, वर्तमान पता, शैक्षणिक योग्यता, अनुभव, अभिरुचियों, आत्मकथ्य, दूरभाष आदि का उल्लेख (परीक्षा में गोपनीयता का निर्वाह अपेक्षित)
- अन्य विशेष जानकारी/ योग्यता आदि

सूचना लेखन

(औपचारिक शैली में व्यावहारिक जीवन से संबंधित विषयों पर आधारित सूचना लेखन)

- सरल एवं बोधगम्य भाषा
- विषय की स्पष्टता
- विषय से जुड़ी संपूर्ण जानकारी
- औपचारिक शिष्टाचार का निर्वाह

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

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

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

निर्धारित समय- 3 घंटे

भारांक-80

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

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

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

निर्धारित पुस्तकें :

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

नोट – निम्नलिखित पाठों से प्रश्न नहीं पूछे जाएँगे-

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

COURSE STRUCTURE CLASS – IX

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

S. No.	Content	Competencies	Explanation
Unit 1: Number Systems			
1.	REAL NUMBERS <ol style="list-style-type: none"> Review of representation of natural numbers, integers, rational numbers on the number line. Representation of terminating/non-terminating recurring decimals on the number line through successive magnification, Rational numbers as recurring/ terminating decimals. Operations on real numbers. 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. Definition of nth root of a real number. 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 numbers and a and b are integers. 	<ul style="list-style-type: none"> Develops a deeper understanding of numbers, including the set of real numbers and its properties. Recognizes and appropriately uses powers and exponents. Computes powers and roots and applies them to solve problems. 	<ul style="list-style-type: none"> Differentiates rational and irrational numbers based on decimal representation. Represents rational and irrational numbers on the number line. Rationalizes real number expressions such as $\frac{1}{a+b\sqrt{x}}$ and $\frac{1}{\sqrt{x}+\sqrt{y}}$, where x, y are natural numbers and a, b are integers. Applies laws of exponents

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

	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			
1.	Coordinate Geometry: <ol style="list-style-type: none"> The Cartesian plane, coordinates of a point Names and terms associated with the coordinate plane, notations. 	<ul style="list-style-type: none"> Specifies locations and describes spatial relationships using coordinate geometry. 	<ul style="list-style-type: none"> Describes cartesian plane and its associated terms and notations
UNIT IV: GEOMETRY			
1.	INTRODUCTION TO EUCLID'S GEOMETRY <ol style="list-style-type: none"> 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. Equivalent versions of the fifth postulate. Showing the relationship between axiom and theorem, for example: <ol style="list-style-type: none"> Given two distinct points, there exists one and only one line through them. (Axiom) (Prove) Two distinct lines cannot have more than one point in common. (Theorem) 	<ul style="list-style-type: none"> Proves theorems using Euclid's axioms and postulates— for triangles, quadrilaterals, and circles and applies them to solve geometric problems. 	<ul style="list-style-type: none"> Understands historical relevance of Indian and Euclidean Geometry. Defines axioms, postulates, theorems with reference to Euclidean Geometry.
2.	LINES AND ANGLES <ol style="list-style-type: none"> (State without proof) If a ray stands on a line, then the sum of the two adjacent angles so formed is 180° and the converse. (Prove) If two lines intersect, vertically opposite angles are equal. (State without proof) Lines which are parallel to a given line are parallel. 	<ul style="list-style-type: none"> derives proofs of mathematical statements particularly related to geometrical concepts, like parallel lines by applying axiomatic approach and solves problems using them. 	<ul style="list-style-type: none"> Visualizes, explains and applies relations between different pairs of angles on a set of parallel lines and intersecting transversal.

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

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

UNIT V: MENSURATION

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

UNIT VI: STATISTICS

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

CLASS – IX (2025-26)

Time: 3 Hrs.

Max. Marks: 80

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

CLASS – IX (2025-26)

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

S. No.	Content	Competencies	Explanation
UNIT II: ALGEBRA			
1.	LINEAR EQUATIONS IN TWO VARIABLES 1. Graph of linear equations in two variables. 2. Examples, problems from real life, including problems on Ratio and Proportion and with algebraic and graphical solutions being done simultaneously.	<ul style="list-style-type: none">Visualizes solutions of a linear equation in two variables as ordered pair of real numbers on its graph.	<ul style="list-style-type: none">Describes and plot a linear equation in two variables.Exemplifies a linear equation in two variables and its possible solutions using real life examples.
UNIT III: COORDINATE GEOMETRY			
1.	Coordinate Geometry: 1. Plotting points in the plane.	<ul style="list-style-type: none">Specifies locations and describes spatial relationships using coordinate geometry, e.g., plotting points in a plane	<ul style="list-style-type: none">Plots/locates points in the plane.
UNIT IV: GEOMETRY			
1.	LINES AND ANGLES 1. (State without proof) Results on corresponding angles, alternate angles, interior angles when a transversal intersects two parallel lines. 2. (Prove) The sum of the angles of a triangle is 180° . 3. (State without proof) If a side of a triangle is produced, the exterior angle so formed is equal to the sum of the two interior opposite angles.	<ul style="list-style-type: none">derives proofs of mathematical statements particularly related to geometrical concepts, like parallel lines by applying axiomatic approach and solves problems using them.	<ul style="list-style-type: none">Visualizes, explains and applies relations between different pairs of angles on a set of parallel lines and intersecting transversal.Solves problems based on parallel lines and intersecting transversal.Visualizes the relation between exterior and interior angles of a triangle.

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

UNIT V: MENSURATION

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

UNIT VI: STATISTICS

1.	STATISTICS 1. Introduction to Statistics: Collection of data, presentation of data — tabular form, ungrouped / grouped data. 2. Mean, median and mode of ungrouped data.	<ul style="list-style-type: none"> Applies measures of central tendencies such as mean, median and mode of ungrouped data. 	<ul style="list-style-type: none"> Organizes raw data in tabular form. Calculates mean, median, mode of ungrouped data
2.	PROBABILITY 1. History, Repeated experiments and observed frequency approach to probability. Focus is on empirical probability. (A large amount of time to be devoted to group and to individual activities to motivate the concept); 2. The experiments to be drawn from real - life situations, and from examples used in the chapter on statistics).	<ul style="list-style-type: none"> Applies concepts from probability to solve problems on the likelihood of everyday events. 	<ul style="list-style-type: none"> Conceptualizes probability using repeated experiments and observed frequencies.

SCIENCE

Subject Code – 086

Classes IX and X (2025-26)

Science Education aims to achieve Scientific understanding of the natural and physical world; Capacities for scientific inquiry; Understanding the evolution of scientific knowledge; Interdisciplinary understanding between science and other curricular areas; Understanding of the relationship between Science, Technology and, Society; Scientific temper and Creativity.

The present syllabus has been designed around seven broad themes viz. Food; Materials; The World of the Living; How Things Work; Moving Things, People and Ideas; Natural Phenomenon and Natural Resources.

The Curricular Goals of Science at the Secondary Stage move from the concrete nature of the Middle Stage towards abstraction - from perceptual and practical concepts to theoretical concepts.

The Learning Standards (Curricular Goals and Competencies) for Science as an integrated curricular area, in alignment with the National Curriculum Framework 2023 are as follows:

<p>CG-1 Explores the world of matter, its interactions, and properties at the atomic level</p>	<p>C-1.1 Describes classification of elements in the Periodic Table, and explains how compounds (including carbon compounds) are formed based on atomic structure (Bohr's model) and properties (valency)</p> <p>C-1.2 Investigates the nature and properties of chemical substances (distillation, crystallisation, chromatography, centrifugation, types and properties of mixtures, solutions, colloids, and suspensions)</p> <p>C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (acid and base, metal, and non-metal, reversible, and irreversible)</p>
<p>CG-2 Explores the physical world around them, and understands scientific principles and laws based on observations and analysis</p>	<p>C-2.1 Applies Newton's laws to explain the effect of forces (change in state of motion – displacement and direction, velocity and acceleration, uniform circular motion, acceleration due to gravity) and analyses graphical and mathematical representations of motion in one dimension</p> <p>C-2.2 Explains the relationship between mass and weight using universal law of gravitation and connect it to laws of motion</p> <p>C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)</p> <p>C-2.4 Manipulates and analyses different characteristics of the circuit (current, voltage, resistance) and mathematises their relationship (Ohm's law), and applies it to everyday usage (electricity bill, short circuit, safety measures)</p> <p>C-2.5 Defines work in scientific terms, and represents the relationship</p>

	<p>between potential and kinetic energy (conservation of energy) in mathematical expressions</p> <p>C-2.6 Demonstrates the principle of mechanical advantage by constructing simple machines (system of levers and pulleys)</p> <p>C-2.7 Describes the origin and properties of sound (wavelength, frequency, amplitude) and differences in what we hear as it propagates through different instruments</p>
<p>CG-3</p> <p>Explores the structure and function of the living world at the cellular level</p>	<p>C-3.1 Explains the role of cellular components (nucleus, mitochondria, endoplasmic reticulum, vacuoles, chloroplast, cell wall), including the semi-permeability of cell membrane in making cell the structural basis of living organisms and functional basis of life processes</p> <p>C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction</p> <p>C-3.3 Describes mechanisms of heredity (in terms of DNA, genes, chromosomes) and variation (as changes in the sequence of DNA)</p>
<p>CG-4</p> <p>Explores interconnectedness between organisms and their environment</p>	<p>C-4.1 Applies the knowledge of cellular diversity in organisms along with the ecological role organisms play (autotrophic or heterotrophic nutrition) to classify them into five-kingdoms</p> <p>C-4.2 Illustrates different levels of organisations of living organisms (from molecules to organisms)</p> <p>C-4.3 Analyses different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level</p> <p>C-4.4 Analyses patterns of inheritance of traits in terms of Mendel's laws and its consequences at a population level (using models and/or simulations)</p> <p>C-4.5 Analyses evidences of biological evolution demonstrating the consequences of the process of natural selection in terms of changes: in allele frequency in population, structure, and function of organisms</p>
<p>CG-5</p> <p>Draws linkages between scientific knowledge and knowledge across other curricular areas</p>	<p>C-5.1 Explores how literature and the arts have influenced Science</p> <p>C-5.2 Examines a case study related to the use of Science in human life from the perspective of Social Sciences and ethics (e.g., Marie Curie, Jenner, treatment of patients with mental illness, the story of the atomic bomb, green revolution and GMOs, conservation of biodiversity)</p> <p>C-5.3 Applies scientific principles to explain phenomena in other subjects (sound pitch, octave, and amplitude in music; use of muscles in dance form and sports)</p>
<p>CG-6</p> <p>Understands and appreciates the contribution of India through history and the present times to the overall</p>	<p>C-6.1 Knows and explains the significant contributions of India to all matters (concepts, explanations, methods) that are studied within the curriculum in an integrated manner</p>

field of Science, including the disciplines that constitute it	
CG-7 Develops awareness of the most current discoveries, ideas, and frontiers in all areas of scientific knowledge in order to appreciate that Science is ever evolving, and that there are still many unanswered questions	<p>C-7.1 States concepts that represent the most current understanding of the matter being studied, ranging from mere familiarity to conceptual understanding of the matter as appropriate to the developmental stage of the students</p> <p>C-7.2 States questions related to matters in the curriculum for which current scientific understanding is well recognised to be inadequate</p>
CG-8 Explores the nature of Science by doing Science	<p>C-8.1 Develops accurate and appropriate models (including geometric, mathematical, graphical) to represent real-life events and phenomena using scientific principles and use these models to manipulate variables and predict results</p> <p>C-8.2 Designs and implements a plan for scientific inquiry (formulates hypotheses, makes predictions, identifies variables, accurately uses scientific instruments, represents data, primary and secondary, in multiple modes, draws inferences based on data and understanding of scientific concepts, theories, laws, and principles, communicates findings using scientific terminology)</p>

It is important to note that the Curricular Goals are interdependent, and not separate curricular pieces of study.

(Reference: National Curriculum Framework for School Education – 2023.)

The competencies, as defined by the NCFSE 2023, are designed to encompass the entire secondary stage (classes IX-XII). Attainment of the competencies shall be done through transaction of the curriculum using appropriate pedagogy; these shall be assessed through an integrated evaluation scheme.

General Instructions for Assessment:

1. There will be an Annual Examination based on the entire syllabus.
2. The Annual Examination will be of 80 marks and 20 marks weightage shall be for Internal Assessment.
3. For Internal Assessment:
 - i) There will be Periodic Assessment that would include:
 - For 5 marks- Three periodic tests conducted by the school. Average of the best two tests to be taken that will have a weightage of 05 marks towards the final result.
 - For 5 marks - Diverse methods of assessment as per the need of the class dynamics and curriculum transaction. These may include - short tests, oral test, quiz, concept maps, projects, posters, presentations and enquiry based

scientific investigations etc. and use of rubrics for assessing them objectively.

This will also have a weightage of 05 marks towards the final result.

- ii) For 5 marks - Practical / Laboratory work that is done throughout the year. The students should maintain record of the same. Practical Assessment should be continuous. All practical work listed in the syllabus must be completed.
- iii) For 5 marks - Portfolio that includes classwork and other sample of student's work.

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

Time: 03 Hours

Marks: 80

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

Theme: Materials

Unit I: Matter-Nature and Behaviour

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

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

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

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

Theme: The World of the Living

Unit II: Organization in the Living World

Cell - Basic Unit of life: Cell as a basic unit of life; prokaryotic and eukaryotic cells, multicellular organisms; cell membrane and cell wall, cell organelles and cell inclusions; chloroplast, mitochondria, vacuoles, endoplasmic reticulum, Golgi apparatus; nucleus, chromosomes - basic structure, number.

Tissues, Organs, Organ System, Organism:

Structure and functions of animal and plant tissues (only four types of tissues in animals; Meristematic and Permanent tissues in plants).

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

Health and Diseases: Health and its failure. Infectious and Non-infectious diseases, their causes and manifestation. Diseases caused by microbes (Virus, Bacteria and Protozoans) and their prevention; Principles of treatment and prevention. Pulse Polio programmes.

Theme: Moving Things, People and Ideas

Unit III: Motion, Force and Work

Motion: Distance and displacement, velocity; uniform and non-uniform motion along a straight line; acceleration, distance-time and velocity-time graphs for uniform motion and uniformly accelerated motion, elementary idea of uniform circular motion.

Force and Newton's laws: Force and Motion, Newton's Laws of Motion, Action and Reaction forces, Inertia of a body, Inertia and mass, Momentum, Force and Acceleration.

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

Elementary idea of conservation of Momentum

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

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

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

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

Theme: Food

Unit IV: Food Production

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

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

PRACTICALS

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

(LIST OF EXPERIMENTS)

- | | |
|--|---------------|
| 1. Preparation of: | 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: | |
| • appearance, i.e., homogeneity and heterogeneity | |

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

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

Unit-I

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

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

Unit - II

5. Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibers and nerve cells in animals, from prepared slides. Draw their labeled diagrams.

Unit-II

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

Unit-I

7. Verification of the laws of reflection of sound.

Unit-III

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

Unit-III

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

Unit-III

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

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

Unit-III

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

Unit-III

SOCIAL SCIENCE
Subject Code-087
Classes - IX & X (2025-26)

RATIONALE

The purpose of the education system is to develop good human beings capable of rational thought and action, possessing compassion and empathy, courage and resilience, scientific temper, and creative imagination, with sound ethical moorings and values. It aims at producing engaged, productive, and contributing citizens for building an equitable, inclusive, and plural society as envisaged by our Constitution. [NEP 2020, pages 4-5]

Social Science is a compulsory subject in secondary stage of school education. It is an integral component of general education. Social Science can play a unique role within the school curriculum to enable Knowledge, Capacities, and Values and Dispositions that underpin the purpose of education as committed to in NEP.

Social Science plays an important role in developing an integrated understanding of the human world and its functioning, including its deep interrelationships with nature and environment in the quest to continuously improve a society. In the study of this subject, students learn methods of observing and interpreting the human world, which help them lead their own lives and also contribute as members of society.

It also helps in developing some of the Values and Dispositions that are essential for democratic participation- building and sustaining cooperation among communities that strive for peace, harmony, equity, and justice for all. It encourages them to understand and appreciate the feeling of Indianness 'Bhartiyata' by valuing the rich cultural heritage and tradition of the country.

The role of the subject in developing a comprehensive sense of the human world and its functioning in an individual student is significant. This understanding is critical to help students see how things around them are changing and are interdependent in the world today what are the causes of the change, and how the change impacts human societies.

It also helps them realise the need for interdependence, collaboration, and an appreciation for the diversity of human culture and societies. The subject also teaches students the method of observing and interpreting the world wearing the hat of a social scientist. It does so by building core skills such as observing what is going on around them, analysing causes of various phenomena (historical, geographical, socio-political, or economic) using evidence, asking questions, making connections, forming viewpoints based on conceptual understanding and evidence, recognizing patterns and generalizations, and arriving at logical conclusions.

These skills prepare the students to contribute to the nation as responsible citizens of society.

AIMS & OBJECTIVE

As per NCF- 2023, the aims of teaching Social Science in school education can be summarised as follows:

- a. Develop disciplinary knowledge and understanding of how society functions through an interplay of historical, geographical, social, economic, and political factors.

This can be enabled through:

- i. an understanding of continuity and change in human civilisation, its causation and effect, and its impact on modern life,
 - ii. an understanding of the interaction between nature and human beings, the spatial patterns arising out of this interaction, and its effect on human life,
 - iii. an awareness and understanding of the diversity of people and their practices in different societies, regions, and cultures within societies,
 - iv. an awareness of various social, political, and economic institutions, their origin, functioning and transformations over time.
- b. Develop an understanding and appreciation for the methods of enquiry relevant to Social Science and deepen students' skills to engage with the key questions and issues confronting society.

These could be specifically seen as:

- i. Skills in sourcing evidence, interpreting them, confirming through multiple sources and evidence, and constructing a coherent narrative,
 - ii. Skills in recognizing spatial patterns, map-reading, interpretation and analysis of various interconnected concepts and processes,
 - iii. Skills of creative and analytical thinking to form informed opinions, demonstrate logical decision-making, and incline towards a problem- solving attitude,
 - iv. Skills to collect, organize, analyse, represent, and present data and information on various historical, geographical, and socio-political issues,
 - v. Skills to question unsubstantiated ideas, biases, stereotypes, and assumptions to foster scientific temper and propose meaningful responses to contemporary concerns of society.
- c. Foster ethical, human, and Constitutional values:

As the NEP 2020 emphasises, to foster a “democratic outlook and commitment to liberty and freedom; equality, justice, and fairness; embracing diversity, plurality, and inclusion; humaneness and fraternal spirit; social responsibility and the spirit of service; ethics of integrity and honesty; scientific temper and commitment to rational and public dialogue; peace; social action through Constitutional means; unity and integrity of the nation, and a true rootedness and pride in India with a forward-looking spirit to continuously improve as a nation.

NOTE-Refer to NCF-2023-Page no-320-323

CURRICULAR GOALS-CG

As per NCF 2023 - At the Secondary Stage, students will go into details to understand India's past and appreciate its complexity, diversity, and unity brought about by cultural integration and the sharing of knowledge traditions across geographical and linguistic boundaries. P-154

- CG -2 Analyse the important phases in world history and draw insight to understand the present-day world
- CG-3 Understand the idea of a nation and the emergence of the modern Indian Nation
- 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
- CG -5 Understand the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government.
- CG -6 Understand and analyse social, cultural, and political life in India over time – as well as the underlying historical Indian ethos and philosophy of unity in diversity – and recognises challenges faced in these areas in the past and present and the efforts (being) made to address them
- CG -7 Develop 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
- CG -8 Evaluate the economic development of a country in terms of its impact on the lives of its people and nature
- CG-9 Understand and appreciate the contribution of India through history and present times, to the overall field of Social Science, and the disciplines that constitute it

COMPETENCIES

Competencies are specific learning achievements that are observable and can be assessed systematically. In NCF, Competencies are directly derived from a Curricular Goal and are expected to be attained by the end of a Stage. The following competencies need to be developed in students to achieve the curricular goals at secondary stage.

- C-2.1 Explain historical events and processes with different types of sources with specific examples from India and world history.
- C-2.3 Trace aspects of continuity and change in different phases of world history (including cultural trends, social and religious reforms, and economic and political transformations)
- C-2.4 Explain the growth of new ideas and practices across the world and how they affected the course of world history.
- C-2.5 Recognise 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.
- C3.2 Identify and analyse important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and

understands the specific Indian concepts, values, and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma self- sacrifice, ahimsa) that played a part in achieving Independence.

- C-4.1 Locate physiographic regions of India and the climatic zones of the world on a globe/map.
- C-4.2 Explain important geographical concepts, characteristics of key landforms, their origin, and other physical factors of a region
- C-4.3 Draw inter- linkages between various components of the physical environment, such as climate and relief, climate and vegetation, vegetation, and wildlife.
- C-4.4 Analyse and evaluate the inter- relationship between 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 evaluate 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
- C-4.6 Develop sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation
- C-5.1 Understand 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)
- C-5.2 Appreciate fundamental Constitutional values and identify their significance for the prosperity of the Indian nation.
- C-5.3 Explain that fundamental rights are the most basic human rights, and they flourish when people also perform their fundamental duties
- C-5.4 Analyse the basic features of a democracy and democratic government – and its history in India and across the world – and compares this form of government with other forms of government.
- C-5.5- Analyse 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
- C-6.1 Understands how the Indian ethos and the cultural integration across India did not attempt uniformity, but respected and promoted a rich diversity in Indian society, and how this harmonisation and unity in diversity, with a historical respect for all cultures, women have counted among India's great strengths by promoting peaceful coexistence
- C-6.2 Understand that despite C-6.1, forms of inequality, injustice, and discrimination have occurred in different sections of society at different times (due to internal as well as outside forces such as colonisation), leading to political, social, and cultural efforts, struggles, movements, and mechanisms at various levels towards equity, inclusion, justice, and harmony, with varying outcomes and degrees of success.
- 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)

- C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country's economy, especially India
- C-7.3 Distinguishes between 'unorganised' and 'organised' sectors of the economy and their role in production for the local market in small, medium, and large-scale production centres (industries), and recognises the special importance of the so-called 'unorganised' sector in Indian economy and its connections with the self-organising features of Indian society
- C-7.4 Trace the beginning and importance of large- scale trade and commerce (including e- commerce) between one country and another - the key items of trade in the beginning, and the changes from time to time.
- C-8.1 Gather, comprehend, and analyse data related to income, capital, poverty, and employment in one's locality, region and at the national level. Markets.
- C-8.3 Understand these features in the context of ancient India, with its thriving trade, both internal and external, and its well- established trade practices and networks, business conventions, and diverse industries, all of which made India one of the world's leading economies up to the colonial period
- 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 economic progress.
- C-8.5 Appreciates the connections between economic development and the environment, and the broader indicators of societal wellbeing beyond GDP growth and income.

In Grades 9 and 10 of the Secondary Stage, the study of Social Science is organised within the disciplines of History, Geography, Political Science, and Economics. The concepts and content are chosen to develop an in-depth understanding in each discipline.

CLASS IX (2025-26) COURSE STRUCTURE

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

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

CLASS IX
History-India and the Contemporary World - I

Section I: Events and Processes

Chapter-1 The French Revolution

Learning Outcomes-The students will be able to

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

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

Chapter 2- Socialism in Europe and the Russian Revolution

Learning Outcomes- The students will be able to

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

Chapter 3-Nazism and the Rise of Hitler.

Learning Outcomes- The students will be able to

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

Section II: Livelihoods, Economies and Societies

Chapter 4- Forest Society and Colonialism

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

Learning Outcomes- Refer Annexure II

Chapter 5- Pastoralists in the Modern World

Learning Outcomes- The students will be able to

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

Geography- Contemporary India - I

Chapter 1- India – Size and Location

Learning Outcomes- The students will be able to

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

Chapter 2- Physical Features of India

Learning Outcomes- The students will be able to

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

Chapter 3- Drainage

Learning Outcomes- The students will be able to

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

Chapter 4- Climate

Learning Outcomes- The students will be able to

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

Chapter 5- Natural Vegetation and Wildlife

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

Learning Outcomes- -Refer annexure II

Chapter-6. Population

Learning Outcomes- The students will be able to

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

Political Science-Democratic Politics - I

Chapter 1- What is Democracy? Why Democracy?

Learning Outcomes- The students will be able to

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

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

Chapter 2- Constitutional Design

Learning Outcomes- The students will be able to

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

Chapter 3- Electoral Politics

Learning Outcomes- The students will be able to

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

Chapter 4- Working of Institutions

Learning Outcomes- The students will be able to

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

Chapter 5- Democratic Rights

Learning Outcomes- The students will be able to

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

ECONOMICS

Chapter 1- The Story of Village Palampur

Learning Outcomes- The students will be able to

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

Chapter 2- People as Resource

Learning Outcomes- The students will be able to

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

Chapter 3- Poverty as a Challenge

Learning Outcomes- The students will be able to

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

Chapter 4- Food Security in India

Learning Outcomes- The students will be able to

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

CLASS IX (2025-26) MAP WORK

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

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

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

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

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

CLASS IX
PRESCRIBED TEXT BOOKS

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