

# ENGLISH LANGUAGE AND LITERATURE

Code No. 184

(2020-21)

(Rationalised Curriculum)

## 1. Background

Traditionally, language-learning materials beyond the initial stages have been sourced from literature: prose, fiction and poetry. 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 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
- use appropriate English to communicate in various social settings
- equip learners with essential language skills to question and to articulate their point of view
- build competence in the different aspects of English
- develop sensitivity to, and appreciation of, other varieties of English, like Indian English, and the culture they reflect
- 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
- facilitate self-learning to enable them to become independent learners
- review, organise and edit their own work and work done by peers
- integrate listening and speaking skills in the curriculum.
- give a brief oral description of events / incidents of topical interest
- 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)
- transcode information from a graph / chart to a description / report and write a dialogue, short story or report

### **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, contrives 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
- Borrowing situations 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 (Code No. 184)  
SYLLABUS CLASS – IX (2020-21)**

<b>Sections</b>	
A	Reading Skills(40periods)
B	Writing Skills with Grammar (40 periods)
C	Literature Textbooks and Supplementary Reading Text(50 periods)

**PART A**

**Reading:-**

**Unseen Passage**

**20 Marks**

Multiple Choice Questions based on a Discursive passage of 400-450 words to test inference, evaluation and vocabulary. Ten out of twelve questions to be answered.

**(10x1=10)**

II. Multiple Choice Questions based on a Case-based factual passage (with visual input-statistical data, chart etc.) of 200-250 words to test analysis and interpretation. Ten out of twelve questions to be answered. **(10x1=10)**

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

## Literature Textbooks

10 Marks

III. Multiple Choice Questions based on an extract from drama/prose to test inference, evaluation and vocabulary. Any 1 out of 2 extracts to be done. **(5x1=5)**

IV. Multiple Choice Questions based on an extract from poetry to test analysis and interpretation. Any 1 out of 2 extracts to be done **(5x1=5)**

## Grammar

10 Marks

V. Ten Multiple Choice Questions, out of twelve, to be answered. Questions shall be based on the following

- i. Tenses
- ii. Modals
- iii. Subject – verb concord
- iv. Reported speech
  - a. Commands and requests
  - b. Statements
  - c. Questions
- v. Determiners

### Deleted:

- **Use of Passive Voice**
- **Clauses: Noun, Adverb Clauses of condition and time, Relative**
- **Prepositions**

## PART B

### Writing 10 marks

I. Writing a Descriptive Paragraph (word limit 100-120 words) on a person or a diary entry based on visual or verbal cue/s. One out of two questions is to be answered. **5 marks**

II. Writing a story (word limit 100-120 words) on the basis of given cue/s . One out of two questions is to be answered. **5 marks**

### Deleted:

- **Letter on a situation**
- **Descriptive Paragraph on a place/event**

## Literature 30 Marks

III. Four out of six Short Answer Type Questions to be answered in 20-30 words each from BEEHIVE and MOMENTS (two out of three from BEEHIVE and two out of three from MOMENTS).  
2x4=8 marks

IV. Four out of six Short Answer Type Questions to be answered in 40-50 words each from BEEHIVE and MOMENTS (two out of three from BEEHIVE and two out of three from MOMENTS).  
3x4=12 marks

V. One out of two Long Answer Type Questions from BEEHIVE to be answered in about 100-120 words each to assess creativity, imagination and extrapolation beyond the text and across the texts. This can be a passage-based question taken from a situation/plot from the texts.  
5 marks

VI. 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.  
5 marks

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

- **BEEHIVE – Textbook for class IX**

#### Deleted-

1. The Lake Isle of Innisfree

2. The Snake & The Mirror

3. The Duck & The Kangaroo

4. Kathmandu

5. A Slumber Did My Spirit Seal

- **MOMENTS – Supplementary Reader for Class IX**

#### Deleted-

1. Ishwaran the Storyteller

2. The Accidental Tourist

- **Words and Expressions-I, Workbook**

### NOTE: Teachers are advised to:

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

- (ii) reduce teacher-talk time and keep it to the minimum,
- (iii) take up questions for discussion to encourage pupils to participate and to marshal their ideas and express and defend their views.

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

1. Reading Section: Reading for comprehension, critical evaluation, inference and analysis are to be tested.
2. Writing Section: All types of short and extended writing tasks will be dealt with.
3. Grammar: Grammar items mentioned in the syllabus will be taught and assessed.

### **INTERNAL ASSESSMENT**

#### **Listening and Speaking Competencies      30 Periods**

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

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

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

### **Guidelines for Assessment in Listening and Speaking Skills**

#### **i. Activities:**

- Activities for listening and speaking available at [www.cbseacademic.in](http://www.cbseacademic.in) can be used for developing listening and speaking skills of students.
- Subject teachers should also refer to books prescribed in the syllabus.
- In addition to the above, teachers may plan their own activities and create their own material for assessing the listening and speaking skills.

#### **ii. Parameters for Assessment:**

The listening and speaking skills are to be assessed on the following parameters:

- i. Interactive competence (Initiation & turn taking, relevance to the topic).
- ii. Fluency (cohesion, coherence and speed of delivery).
- iii. Pronunciation
- iv. Language (accuracy and vocabulary).

**iii. Schedule:**

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

**iv. Record keeping:**

The record of the activities done and the marks given must be kept for three months after the declaration of result, for any random checking by the Board.

**No recording of speaking skills is to be sent to the Board.**

## ENGLISH LANGUAGE AND LITERATURE

(Code No. 184) CLASS – IX (2020 – 21) Marks-80

Sections	Competencies	Total marks	% Weightage
Reading Comprehension	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	20	25%
Writing Skill and Grammar	Creative expression of an opinion, reasoning, justifying, illustrating, appropriacy of style and tone, using appropriate format and fluency. Applying conventions, using integrated structures with accuracy and fluency	20	25%
Literature Textbook and Supplementary Reading Text	Recalling, reasoning, appreciating, applying literary conventions illustrating and justifying etc. Extract relevant information, identifying the central theme and sub-theme, understanding the writers' message and writing fluently.	40	50%
<b>Total</b>		<b>80</b>	

**ENGLISH LANGUAGE AND LITERATURE (Code No. 184)**

**CLASS – X(2020-21)**

**SECTION - WISE WEIGHTAGE**

<b>Sections</b>	
A	Reading Skills (40 periods)
B	Writing Skills with Grammar (40 periods)
C	Literature Textbooks and Supplementary Reading Text(50 periods)
	TOTAL

**PART A**

**Reading**

**20Marks**

I. Multiple Choice Questions based on a Discursive passage of 400-450 words to test inference, evaluation and vocabulary. Ten out of twelve questions to be answered.

**(10x1=10)**

II. Multiple Choice Questions based on a Case-based factual passage (with visual input-statistical data, chart etc.) of 300-350 words to test analysis and interpretation. Ten out of twelve questions to be answered. **(10x1=10)**

**(Total length of two passages to be 700-750 words).**

**Literature Textbooks**

**10 Marks**

III. Multiple Choice Questions based on an extract from drama/prose to test inference, evaluation and vocabulary. Any 1 out of 2 extracts to be done. **(5x1=5)**

IV. Multiple Choice Questions based on an extract from poetry to test analysis and interpretation. Any 1 out of 2 extracts to be done **(5x1=5)**

**Grammar**

**10 Marks**

V. Ten Multiple Choice Questions, out of twelve, to be answered. Questions shall be based on the following:

- i. Tenses
- ii. Modals
- iii. Subject – verb concord
- iv. Reported speech
  - a. Commands and requests
  - b. Statements
  - c. Questions
- v. Determiners

**Deleted:**

- **Use of Passive Voice**
- **Clauses: Noun, Adverb, Relative**
- **Prepositions**

**PART B – Subjective Questions (40 marks)**

**Writing**

**10 Marks**

I. Formal letter (word limit 100-120 words) based on a given situation. One out of two questions is to be answered. **5 marks**

II. Writing an analytical paragraph (word limit 100-120 words) based on a given outline/ Data/ Chart/ Cue/s .One out of two questions is to be answered. **5 marks**

**Literature**

**30 Marks**

III. **Four out of six** Short Answer Type Questions to be answered in 20-30 words each from FIRST FLIGHT and FOOTPRINTS WITHOUT FEET (two out of three from FIRST FLIGHT and two out of three from FOOTPRINTS WITHOUT FEET).**2x4=8 marks**

IV. **Four out of six** Short Answer Type Questions to be answered in 40-50 words each from FIRST FLIGHT and FOOTPRINTS WITHOUT FEET (two out of three from FIRST FLIGHT and two out of three from FOOTPRINTS WITHOUT FEET). **3x4=12 marks**

V. **One out of two** Long Answer Type Questions from FIRST FLIGHT to be answered in about 100-120 words each to assess creativity, imagination and extrapolation beyond the text and across the texts. This can be a passage-based question taken from a situation/plot from the texts. **5 marks**

VI. **One out of two** Long Answer Type Questions from FOOTPRINTS WITHOUT FEET on theme or plot involving interpretation, extrapolation beyond the text and inference or character sketch to be answered in about 100-120 words. **5 marks**

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

**1. FIRST FLIGHT – Text for Class X**

**Deleted-**

**1. How to Tell Wild Animals**

**2. Trees**

**3. Fog**

**4. Mijbil the Otter**

**5. For Anne Gregory**

**2. FOOTPRINTS WITHOUT FEET – Supplementary Reader for Class X**

**Deleted-**

**1. The Midnight Visitor**

**2. A Question of Trust**

**3. The Book That Saved The Earth**

**3. WORDS AND EXPRESSIONS – II (WORKBOOK FOR CLASS X)**

**Note: Teachers are advised to:**

- (i) encourage interaction among peers, students and teachers through activities such as role play, discussions, group work etc.
- (ii) reduce teacher-talking time and keep it to the minimum,
- (iii) take up questions for discussion to encourage pupils to participate and to marshal their ideas and express and defend their views, and
- (iv) follow the Speaking and Listening activities given in the NCERT books.

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

1. Reading Section: Reading for comprehension, critical evaluation, inference and analysis are to be tested.
2. Writing Section: All types of short and extended writing tasks will be dealt with.
3. Grammar: Grammar items mentioned in the syllabus will be taught and assessed over a period of time.

## **INTERNAL ASSESSMENT**

### **Listening and Speaking Competencies      30 Periods**

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

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

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**ENGLISH LANGUAGE AND LITERATURE**  
**Code no.(184)**

**CLASS - X (2020-21)Marks 80**

<b>Sections</b>	<b>Competencies</b>	<b>Total marks</b>	<b>% Weightage</b>
Reading Comprehension	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	20	25%
Writing Skill and Grammar	Creative expression of an opinion, reasoning, justifying, illustrating, appropriacy of style and tone, using appropriate format and fluency. Applying conventions, using integrated structures with accuracy and fluency	20	25%
Literature Textbook and Supplementary Reading Text	Recalling, reasoning, appreciating, applying literary conventions illustrating and justifying etc. Extract relevant information, identifying the central theme and sub-theme, understanding the writers' message and writing fluently.	40	50%
<b>Total</b>		<b>80</b>	

## द्वितीय भाषा के रूप में हिंदी (कोड सं.-085)

### कक्षा 9वीं – 10वीं (2020-21)

भारत एक बहुभाषी देश है जिसमें बहुत सी क्षेत्रीय भाषाएँ रची बसी हैं। भाषिक और सांस्कृतिक दृष्टि से भिन्न होने के बावजूद भारतीय परंपरा में बहुत कुछ ऐसा है जो एक दूसरे को जोड़ता है। यही कारण है कि मातृभाषा के रूप में अलग भाषा को पढ़ने वाला विद्यार्थी जब दूसरी भाषा के रूप में हिंदी का चुनाव करता है तो उसके पास अभिव्यक्ति का एक दृढ़ आधार पहली भाषा के रूप में पहले से ही मौजूद होता है। इसलिए छोटी से आठवीं कक्षा में सीखी हुई हिंदी का विकास भी वह तेजी से करने लगता है। आठवीं कक्षा तक वह हिंदी भाषा में सुनने, पढ़ने, लिखने और कुछ-कुछ बोलने का अभ्यास कर चुका होता है। हिंदी की बाल पत्रिकाएँ और छिटपुट रचनाएँ पढ़ना भी अब उसे आ गया है। इसलिए जब वह नवीं एवं दसवीं कक्षा में हिंदी पढ़ेगा तो जहाँ एक ओर हिंदी भाषा के माध्यम से सारे देश से जुड़ेगा वहीं दूसरी ओर अपने क्षेत्र और परिवेश को हिंदी भाषा के माध्यम से जानने की कोशिश भी करेगा, क्योंकि किशोरवय के इन बच्चों के मानसिक धरातल का विकास विश्व स्तर तक पहुँच चुका होता है।

### शिक्षण उद्देश्य

- दैनिक जीवन में हिंदी में समझने-बोलने के साथ-साथ लिखने की क्षमता का विकास ।
- हिंदी के किशोर-साहित्य, अखबार व पत्रिकाओं को पढ़कर समझ पाना और उसका आनंद उठाने की क्षमता का विकास ।
- औपचारिक विषयों और संदर्भों में बातचीत में भाग ले पाने की क्षमता का विकास ।
- हिंदी के जरिए अपने अनुभव संसार को लिख कर सहज अभिव्यक्ति कर पाने में सक्षम बनाना।
- संचार के विभिन्न माध्यमों (प्रिंट और इलेक्ट्रॉनिक) में प्रयुक्त हिंदी के विभिन्न रूपों को समझने की योग्यता का विकास ।
- कक्षा में बहुभाषिक, बहुसांस्कृतिक संदर्भों के प्रति संवेदनशील सकारात्मक सोच बनाना।
- अपनी मातृभाषा और परिवेशगत भाषा को साथ रखकर हिंदी की संरचनाओं की समझ बनाना।
- सामाजिक मुद्दों पर समझ बनाना। (जाति, लिंग तथा आर्थिक विषमता)
- कविता, कहानी तथा घटनाओं को रोचक ढंग से लिखना।
- जाति, धर्म, रीति-रिवाज तथा लिंग के विषय को समझने की क्षमता का विकास।
- भाषा एवं साहित्य को समझने एवं आत्मसात करने की दक्षता का विकास।

### शिक्षण युक्तियाँ

- द्वितीय भाषा के रूप में पढ़ाई जा रही हिंदी भाषा का स्तर पढ़ने और पढ़ाने दोनों ही दृष्टियों से मातृभाषा सीखने की तुलना में कुछ मंथर गति से चलेगा। वह गति धीरे-धीरे बढ़ सके, इसके लिए हिंदी अध्यापकों को बड़े धीरे-धीरे से अपने अध्यापन कार्यक्रमों को नियोजित करना होगा। किसी भी द्वितीय भाषा में निपुणता प्राप्त करने-कराने का एक ही उपाय है-उस भाषा का लगातार रोचक अभ्यास करना-कराना। ये अभ्यास जितने अधिक रोचक, सक्रिय एवं प्रासंगिक होंगे विद्यार्थियों की भाषिक उपलब्धि भी उतनी ही तेजी से हो सकेगी।

मुखर भाषिक अभ्यास के लिए वार्तालाप, रोचक कहानी सुनना-सुनाना, घटना-वर्णन, चित्र-वर्णन, संवाद, वाद-विवाद, अभिनय, भाषण प्रतियोगिताएँ, कविता पाठ और अंत्याक्षरी जैसी गतिविधियों का सहारा लिया जा सकता है।

- काव्य भाषा के मर्म से विद्यार्थी का परिचय कराने के लिए जरूरी 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।
- एन.सी.ई.आर.टी. मानव संसाधन विकास मंत्रालय के विभिन्न संगठनों तथा स्वतंत्र निर्माताओं द्वारा उपलब्ध कराए गए कार्यक्रम/ई सामग्री/ वृत्तचित्रों और सिनेमा को शिक्षण-सामग्री के तौर पर इस्तेमाल करने की जरूरत है। इनके प्रदर्शन के क्रम में इन पर लगातार बातचीत के जरिए 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 सिर्फ एक 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 कर सकें।
- 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 बारीक अंतर के प्रति और सजग हो पाएँगे।
- 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 अध्यापन को हर प्रकार की विविधताओं (लिंग, धर्म, जाति, वर्ग आदि) के प्रति सकारात्मक और संवेदनशील वातावरण निर्मित करना चाहिए।

### **श्रवण (सुनने) और वाचन (बोलने) की योग्यताएँ**

- प्रवाह के साथ बोली जाती हुई हिंदी को अर्थबोध के साथ समझना।
- हिंदी शब्दों का ठीक उच्चारण करना तथा हिंदी के स्वाभाविक अनुतान का प्रयोग करना।
- सामान्य विषयों पर बातचीत करना और परिचर्चा में भाग लेना।
- हिंदी कविताओं को उचित लय, आरोह-अवरोह और भाव के साथ पढ़ना।
- सरल विषयों पर कुछ तैयारी के साथ दो-चार मिनट का भाषण देना।
- हिंदी में स्वागत करना, परिचय और धन्यवाद देना।
- हिंदी अभिनय में भाग लेना।

## आंतरिक मूल्यांकन हेतु –

### श्रवण तथा वाचन परीक्षा हेतु दिशा-निर्देश

- **श्रवण (सुनना) (5अंक):** वर्णित या पठित सामग्री को सुनकर अर्थग्रहण करना, वार्तालाप करना, वाद-विवाद, भाषण, कवितापाठ आदि को सुनकर समझना, मूल्यांकन करना और अभिव्यक्ति के ढंग को समझना।
- **वाचन (बोलना) (5अंक):** भाषण, सस्वर कविता-पाठ, वार्तालाप और उसकी औपचारिकता, कार्यक्रम-प्रस्तुति, कथा-कहानी अथवा घटना सुनाना, परिचय देना, भावानुकूल संवाद-वाचन।

**टिप्पणी:** वार्तालाप की दक्षताओं का मूल्यांकन निरंतरता के आधार पर परीक्षा के समय ही होगा। निर्धारित 10 अंकों में से 5 श्रवण (सुनना) कौशल के मूल्यांकन के लिए और 5 वाचन (बोलना) कौशल के मूल्यांकन के लिए होंगे।

### वाचन (बोलना) एवं श्रवण (सुनना) कौशल का मूल्यांकन:

- परीक्षक किसी प्रासंगिक विषय पर एक अनुच्छेद का स्पष्ट वाचन करेगा। अनुच्छेद तथ्यात्मक या सुझावात्मक हो सकता है। अनुच्छेद लगभग 80-100 शब्दों का होना चाहिए।
- या
- परीक्षक 2-3 मिनट का श्रव्य अंश (ऑडियो क्लिप) सुनवाएगा। अंश रोचक होना चाहिए। कथ्य/ घटना पूर्ण एवं स्पष्ट होनी चाहिए। वाचक का उच्चारण शुद्ध, स्पष्ट एवं विराम चिह्नों के उचित प्रयोग सहित होना चाहिए।
- परीक्षार्थी ध्यानपूर्वक परीक्षक/ऑडियो क्लिप को सुनने के पश्चात परीक्षक द्वारा पूछे गए प्रश्नों का अपनी समझ से मौखिक उत्तर देंगे। (1x5 =5)
- किसी निर्धारित विषय पर बोलना: जिससे विद्यार्थी अपने व्यक्तिगत अनुभवों का प्रत्यास्मरण कर सकें।
- कोई कहानी सुनाना या किसी घटना का वर्णन करना।
- परिचय देना। (स्व/ परिवार/ वातावरण/ वस्तु/ व्यक्ति/ पर्यावरण/ कवि/लेखक आदि)
- परीक्षण से पूर्व परीक्षार्थी को तैयारी के लिए कुछ समय दिया जाए।
- विवरणात्मक भाषा में वर्तमान काल का प्रयोग अपेक्षित है।
- निर्धारित विषय परीक्षार्थी के अनुभव-जगत के हों।
- जब परीक्षार्थी बोलना आरंभ करें तो परीक्षक कम से कम हस्तक्षेप करें।

### कौशलों के अंतरण का मूल्यांकन

(इस बात का निश्चय करना कि क्या विद्यार्थी में श्रवण और वाचन की निम्नलिखित योग्यताएँ हैं)

क्र. सं.	श्रवण (सुनना)		वाचन (बोलना)
1	परिचित संदर्भों में प्रयुक्त शब्दों और पदों को समझने की सामान्य योग्यता है।	1	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 केवल छोटे संबद्ध कथनों का सीमित शुद्धता से प्रयोग करता है।

3	परिचित या अपरिचित दोनों संदर्भों में कथित सूचना को स्पष्ट समझने की योग्यता है।	3	अपेक्षाकृत दीर्घ भाषण में जटिल कथनों के प्रयोग की योग्यता प्रदर्शित करता है।
4	दीर्घ कथनों की शृंखला को पर्याप्त शुद्धता से समझने के ढंग और निष्कर्ष निकाल सकने की योग्यता है।	4	अपरिचित स्थितियों में विचारों को तार्किक ढंग से संगठित कर धारा-प्रवाह रूप में प्रस्तुत करता है।
5	जटिल कथनों के विचार-बिंदुओं को समझने की योग्यता प्रदर्शित करने की क्षमता है।	5	उद्देश्य और श्रोता के लिए उपयुक्त शैली को अपना सकता है।

**परियोजना कार्य - कुल अंक 10**

· विषय वस्तु	-	5 अंक
· भाषा एवं प्रस्तुति	-	3 अंक
· शोध एवं मौलिकता	-	2 अंक

- हिन्दी भाषा और साहित्य से जुड़े विविध विषयों/ विधाओं / साहित्यकारों / समकालीन लेखन / साहित्यिक वादों / भाषा के तकनीकी पक्ष / प्रभाव / अनुप्रयोग / साहित्य के सामाजिक संदर्भों एवं जीवन मूल्य संबंधी प्रभावों आदि पर परियोजना कार्य दिए जाने चाहिए।
- सत्र के प्रारंभ में ही विद्यार्थी को विषय चुनने का अवसर मिले ताकि उसे शोध, तैयारी और लेखन के लिए पर्याप्त समय मिल सके।
- **वाचन-श्रवण कौशल एवं परियोजना कार्य का मूल्यांकन विद्यालय स्तर पर आंतरिक परीक्षक द्वारा ही किया जाएगा।**

**पठन कौशल**

**पढ़ने की योग्यताएँ**

- हिंदी में कहानी, निबंध, यात्रा-वर्णन, जीवनी, पत्र, डायरी आदि को अर्थबोध के साथ पढ़ना।
- पाठ्यवस्तु के संबंध में विचार करना और अपना मत व्यक्त करना।
- संदर्भ साहित्य को पढ़कर अपने काम के लायक सूचना एकत्र करना।
- पठित सामग्री के विभिन्न अंशों का परस्पर संबंध समझना।
- पठित वस्तु का सारांश तैयार करना।
- भाषा, विचार एवं शैली की सराहना करना।
- साहित्य के प्रति अभिरुचि का विकास करना।

## लिखने की योग्यताएँ

- लिखते हुए व्याकरण-सम्मत भाषा का प्रयोग करना।
- हिंदी के परिचित और अपरिचित शब्दों की सही वर्तनी लिखना।
- विराम चिह्नों का समुचित प्रयोग करना।
- लेखन के लिए सक्रिय (व्यवहारोपयोगी) शब्द भंडार की वृद्धि करना।
- प्रभावपूर्ण भाषा तथा लेखन-शैली का स्वाभाविक रूप से प्रयोग करना।
- उपयुक्त अनुच्छेदों में बांटकर लिखना।
- प्रार्थना पत्र, निमंत्रण पत्र, बधाई पत्र, संवेदना पत्र, आदेश पत्र, ई मेल, एस.एम.एस आदि लिखना और विविध प्रपत्रों को भरना।
- विविध स्रोतों से आवश्यक सामग्री एकत्र कर एक अभीष्ट विषय पर अनुच्छेद लिखना।
- देखी हुई घटनाओं का वर्णन करना और उन पर अपनी प्रतिक्रिया प्रकट करना।
- पढ़ी हुई कहानी को संवाद में तथा संवाद को कहानी में परिवर्तित करना।
- समारोह और गोष्ठियों की सूचना और प्रतिवेदन तैयार करना।
- लिखने में मौलिकता और सर्जनात्मकता लाना।

## **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-केन्द्रित – प्रारंभ से अंत तक अनुच्छेद का एक सूत्र में बंधा होना।
- समासिकता – सीमित शब्दों में यथासंभव पूरी बात कहने का प्रयास, अनावश्यक बातें न करके केवल विषय संबद्ध वर्णन-विवेचन।

### **पत्र लेखन**

- अनौपचारिक पत्र विचार-विमर्श का जरिया जिनमें मैत्रीपूर्ण भावना निहित, सरलता, संक्षिप्त और सादगी के साथ लेखन शैली।

- औपचारिक पत्रों द्वारा दैनंदिनी 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 स्पष्ट और प्रत्यक्ष बात की प्रस्तुति।
- प्रारूप की आवश्यक औपचारिकताओं के साथ सुस्पष्ट, सुलझे और क्रमबद्ध विचार आवश्यक तथ्य, संक्षेप और सम्पूर्णता के साथ प्रभावान्विति।

## 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)

## संवाद लेखन

दो या दो से अधिक लोगों के बीच होने वाले वार्तालाप/ बातचीत विषय, काल्पनिक या किसी वार्ता को सुनकर यथार्थ पर आधारित संवाद लेखन की रचनात्मक शक्ति का विकास, कहानी, नाटक, फिल्म और टीवी सीरियल से लें।

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

## सूचना लेखन

किसी विशेष सूचना को सार्वजनिक करना, कम शब्दों में औपचारिक शैली में लिखी गई संक्षिप्त जानकारी

जिसमें लेखन में

- उद्देश्य की स्पष्टता।
- आम बोलचाल की भाषा और सरल वाक्यों का प्रयोग।
- स्पष्ट शीर्षक, मुख्य तथ्य/ विषय वस्तु, उपयोगी संपर्क सूत्र के साथ स्पष्ट संप्रेषण क्षमता।

### **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

### **कहानी लेखन (दी गई पंक्तियों के आधार से कहानी लेखन)**

- निरंतरता
- रचनात्मकता/कल्पना शक्ति का उपयोग
- प्रभावी संवाद/ पात्रानुकूल संवाद
- जिज्ञासा/ रोचकता
- कथात्मकता

### **नारा लेखन (दिए गए विषय पर आधारित नारा लेखन)**

- शब्दों का उपयुक्त चयन एवं आपसी ताल-मेल
- विषय से संबद्धता
- आकर्षण
- मौलिकता
- रचनात्मकता

कक्षा 9वीं हिंदी 'ब'-परीक्षाओं हेतु पाठ्यक्रम विनिर्देशन 2020-21

परीक्षा भार विभाजन				
	विषयवस्तु	उप भार	कुल भार	
1	अपठित गद्यांश (चिंतन क्षमता एवं अभिव्यक्ति कौशल पर अति लघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न पूछे जाएंगे)		10	
	i	अपठित गद्यांश (100 से 150 शब्दों के) (1 अंक x 2 प्रश्न =2 अंक) (2 अंक x4 प्रश्न =8 अंक)		10
2	व्याकरण पाठ्यपुस्तक में दिए गए भाषा-अध्ययन के आधार पर (1 अंक x16 प्रश्न)		16	
	i	शब्द और पद(2 अंक)		02
	ii	अनुस्वार (1 अंक), अनुनासिक (1 अंक)		02
	iii	उपसर्ग (2 अंक), प्रत्यय (2 अंक)		04
	iv	शब्द-विचार श्रुतिसम भिन्नार्थक शब्द – 2 पर्यायवाची – 2 विलोम – 2		06
	v	अर्थ की दृष्टि से वाक्य भेद (2 अंक)		02

3	पाठ्यपुस्तक स्पर्श भाग – 1 तथा पूरक पाठ्यपुस्तक संचयन भाग 1			28
	अ	गद्य खंड	11	
		i पाठ्यपुस्तक स्पर्श के गद्य पाठों के आधार पर लघु प्रश्न 1(2 अंक x3 प्रश्न)	06	
		ii पाठ्य पुस्तक स्पर्श के निर्धारित पाठों (गद्य) पर एक निबंधात्मक प्रश्न (5 अंक x 1 प्रश्न) (विकल्प सहित)	05	
	ब	काव्य खंड	11	
		i पाठ्यपुस्तक स्पर्श के काव्य खंड के आधार पर लघु प्रश्न (2 अंक x 3 प्रश्न)	06	
		ii कविता की समझ पर आधारित एक निबंधात्मक प्रश्न (5 अंक x 1 प्रश्न) (विकल्प सहित)	05	
	स	पूरक पाठ्यपुस्तक संचयन भाग – 1	06	
		‘संचयन’ के निर्धारित पाठों पर आधारित दो प्रश्न पूछे जाएँगे (3 अंक x 2 प्रश्न) (विकल्प सहित)	06	
4	लेखन		26	
	अ	संकेत बिंदुओं पर आधारित समसामयिक/व्यावहारिक जीवन से जुड़े हुए विषयों में से किसी एक विषय पर 80 से 100 शब्दों में अनुच्छेद (6 अंक x 1 प्रश्न) (विकल्प सहित)	06	

	<b>ब</b>	अनौपचारिक विषय से संबंधित पत्र (5 अंक x 1 प्रश्न) (विकल्प सहित)	05	<b>26</b>
	<b>स</b>	संदेश लेखन (शुभकामना, पर्व-त्योहारों एवं विशेष अवसरों पर दिए जाने वाले संदेश) (30-40 शब्दों में) (5 अंक x 1 प्रश्न) (विकल्प सहित)	05	
	<b>द</b>	किसी एक स्थिति पर 50-60 शब्दों के अंतर्गत संवाद लेखन (5 अंक x 1 प्रश्न) (विकल्प सहित)	05	
	<b>इ</b>	नारा-लेखन (स्लोगन लेखन) 20-30 शब्दों में विषय से संबंधित लेखन (5 अंक x 1 प्रश्न) (विकल्प सहित)	05	
<b>कुल</b>			<b>80</b>	
<b>5</b>	<b>(क)</b>	<b>श्रवण तथा वाचन -10 अंक</b>	10	<b>10</b>
	<b>(ख)</b>	<b>परियोजना – 10 अंक</b>	10	<b>10</b>
<b>कुल अंक</b>				<b>100</b>

**निर्धारित पुस्तकें:**

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

❖ नोट: निम्नलिखित पाठ हटा दिये गये हैं ।

<b>स्पर्श (भाग – 1)</b>	धीरंजन मालवे-वैज्ञानिक चेतना के वाहक चंद्रशेखर वेंकट रामन रामधारी सिंह दिनकर- गीत-अगीत काका कालेलकर-कीचड़ का काव्य स्वामी आनंद-शुक्रतारे के समान नज़ीर अकबराबादी-आदमी नामा हरिवंशराय बच्चन-अग्नि पथ अरुण कमल-नए इलाके में...
<b>संचयन (भाग – 1)</b>	कल्लू कुम्हार की उनाकोटी मेरा छोटा-सा निजी पुस्तकालय

**कक्षा 10वीं हिंदी 'ब' परीक्षा हेतु पाठ्यक्रम विनिर्देशन 2020-2021**

- प्रश्न-पत्र दो खण्डों - खंड 'अ' और 'ब' का होगा।
- खंड 'अ' में वस्तुपरक प्रश्न पूछे जाएँगे।
- खंड 'अ' में कुल 53 प्रश्न होंगे जिनमें से केवल 40 प्रश्नों के ही उत्तर देने होंगे।
- खंड 'ब' में वर्णनात्मक प्रश्न पूछे जाएँगे। प्रश्नों में उचित आंतरिक विकल्प दिए जाएँगे।

परीक्षा भार विभाजन			
खंड अ (वस्तुपरक प्रश्न)			
	विषयवस्तु	उप भार	कुल भार
1	अपठित गद्यांश (चिंतन क्षमता एवं अभिव्यक्ति कौशल पर बहुविकल्पात्मक प्रश्न पूछे जाएँगे)		10
	अ चार अपठित गद्यांशों में से कोई दो गद्यांश करने होंगे। (200-250 शब्दों के) 2 गद्यांश x(1 अंक x 5 प्रश्न)	10	
2	<b>व्याकरण:</b> पाठ्यपुस्तक में दिए गए भाषा-अध्ययन के आधार पर बहुविकल्पात्मक प्रश्न (1 अंक x16 प्रश्न)		16
	1 पद बंध (5 में से किन्हीं 4 के उत्तर) (1 अंक x 4 प्रश्न)	04	
	2 रचना के आधार पर वाक्य रूपांतरण (5 में से किन्हीं 4 के उत्तर) (1 अंक x 4 प्रश्न)	04	
	3 समास (5 में से किन्हीं 4 के उत्तर) (1 अंक x 4 प्रश्न)	04	
	4 मुहावरे (केवल 4 प्रश्न, सभी अनिवार्य) (1 अंक x 4 प्रश्न)	04	
3	पाठ्यपुस्तक स्पर्श भाग – 2		14

	<b>काव्य खंड</b>	04	
	पठित पद्यांश पर चार बहुविकल्पी प्रश्न। (1 अंक x 4 प्रश्न)		
	<b>गद्य खंड</b>	10	
	दो पठित गद्यांशों पर पाँच-पाँच बहुविकल्पी प्रश्न। 2 गद्यांश x(1 अंक x 5 प्रश्न)		
<b>परीक्षा भार विभाजन</b>			
<b>खंड ब (वर्णनात्मक प्रश्न)</b>			
	<b>विषयवस्तु</b>	<b>उप भार</b>	<b>कुल भार</b>
<b>4</b>	<b>पाठ्यपुस्तक स्पर्श भाग – 2</b>	<b>08</b>	<b>14</b>
	<b>1</b> स्पर्श से निर्धारित पाठों के आधार पर विषय-वस्तु का ज्ञान, बोध, अभिव्यक्ति आदि पर 25-30 शब्दों वाले तीन में दो प्रश्न पूछे जाएंगे। (2 अंक x 2 प्रश्न)	04	
	<b>2</b> स्पर्श से निर्धारित पाठों के आधार पर विद्यार्थियों की उच्च चिंतन क्षमताओं एवं अभिव्यक्ति का आकलन करने हेतु 60-70 शब्दों वाला (4 अंक x 1 प्रश्न)	04	
	<b>पूरक पाठ्यपुस्तक संचयन भाग – 2</b>	<b>06</b>	
	पूरक पाठ्यपुस्तक संचयन के निर्धारित पाठों से तीन में से दो प्रश्न पूछे जाएंगे जिनका उत्तर 40-50 शब्दों में देना होगा। (3 अंक x 2 प्रश्न)	06	
<b>5</b>	<b>लेखन</b>		
	<b>अ</b> संकेत बिंदुओं पर आधारित समसामयिक एवं व्यावहारिक जीवन से जुड़े हुए किन्हीं तीन विषयों में से किसी एक विषय पर 80 से 100 शब्दों में अनुच्छेद। (6 अंक x1 प्रश्न) (विकल्प सहित)	6	
	<b>ब</b> औपचारिक विषय से संबंधित पत्र। (5 अंक x1 प्रश्न) (विकल्प सहित)	5	

	<b>स</b>	व्यावहारिक जीवन से संबंधित विषयों पर आधारित 30-40 शब्दों में सूचना लेखन। (5 अंक x1 प्रश्न) (विकल्प सहित)	5	<b>26</b>
	<b>द</b>	विषय से संबंधित 25-50 शब्दों के अंतर्गत विज्ञापन लेखन। (5 अंक x1 प्रश्न) (विकल्प सहित)	5	
	<b>इ</b>	लघु कथा लेखन – दिए गए प्रस्थान बिंदु के आधार पर 100-120 शब्दों में लघु कथा लेखन। (5 अंक x1 प्रश्न) (विकल्प सहित)	5	
<b>कुल</b>				<b>80</b>
<b>6</b>	<b>(क)</b>	<b>श्रवण तथा वाचन -10 अंक</b>	10	10
	<b>(ख)</b>	<b>परियोजना – 10 अंक</b>	10	10
<b>कुल अंक</b>				<b>100</b>

निर्धारित पुस्तकें:

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

❖ **नोट: निम्नलिखित पाठ हटा दिये गये हैं।**

<b>व्याकरण खंड</b>	
<b>1.</b>	अलंकार
<b>पद्य खंड</b>	
<b>1.</b>	बिहारी-दोहे

2.	महादेवी वर्मा-मधुर-मधुर मेरे दीपक जल
3.	वीरेन डंगवाल-तोप
4.	रवींद्रनाथ ठाकुर-आत्मत्राण
<b>गद्य खंड</b>	
5.	सीताराम सेकसरिया-डायरी का एक पन्ना
6.	प्रहलाद अग्रवाल-तीसरी कसम के शिल्पकार शैलेंद्र
7.	अंतोन चेखव-गिरगिट
8.	रवींद्र केलेकर-पतझड़ में टूटी पत्तियाँ : (i) गिन्नी का सोना

**Revised MATHEMATICS (IX-X)**  
**(CODE NO. 041)**  
**Session 2020-21**

The Syllabus in the subject of Mathematics has undergone changes from time to time in accordance with growth of the subject and emerging needs of the society. The present revised syllabus has been designed in accordance with National Curriculum Framework 2005 and as per guidelines given in the Focus Group on Teaching of Mathematics which is to meet the emerging needs of all categories of students. For motivating the teacher to relate the topics to real life problems and other subject areas, greater emphasis has been laid on applications of various concepts.

The curriculum at Secondary stage primarily aims at enhancing the capacity of students to employ Mathematics in solving day-to-day life problems and studying the subject as a separate discipline. It is expected that students should acquire the ability to solve problems using algebraic methods and apply the knowledge of simple trigonometry to solve problems of height and distances. Carrying out experiments with numbers and forms of geometry, framing hypothesis and verifying these with further observations form inherent part of Mathematics learning at this stage. The proposed curriculum includes the study of number system, algebra, geometry, trigonometry, mensuration, statistics, graphs and coordinate geometry, etc.

The teaching of Mathematics should be imparted through activities which may involve the use of concrete materials, models, patterns, charts, pictures, posters, games, puzzles and experiments.

### **Objectives**

The broad objectives of teaching of Mathematics at secondary stage are to help the learners to:

- consolidate the Mathematical knowledge and skills acquired at the upper primary stage;
- acquire knowledge and understanding, particularly by way of motivation and visualization, of basic concepts, terms, principles and symbols and underlying processes and skills;
- develop mastery of basic algebraic skills;
- develop drawing skills;
- feel the flow of reason while proving a result or solving a problem;
- apply the knowledge and skills acquired to solve problems and wherever possible, by more than one method;
- to develop ability to think, analyze and articulate logically;
- to develop awareness of the need for national integration, protection of environment, observance of small family norms, removal of social barriers, elimination of gender biases;
- to develop necessary skills to work with modern technological devices and mathematical software's.
- to develop interest in mathematics as a problem-solving tool in various fields for its beautiful structures and patterns, etc.
- to develop reverence and respect towards great Mathematicians for their contributions to the field of Mathematics;
- to develop interest in the subject by participating in related competitions;
- to acquaint students with different aspects of Mathematics used in daily life;
- to develop an interest in students to study Mathematics as a discipline.

## COURSE STRUCTURE CLASS -IX

Units	Unit Name	Marks
I	NUMBER SYSTEMS	08
II	ALGEBRA	17
III	COORDINATE GEOMETRY	04
IV	GEOMETRY	28
V	MENSURATION	13
VI	STATISTICS & PROBABILITY	10
	Total	<b>80</b>

### UNIT I: NUMBER SYSTEMS

#### 1. REAL NUMBERS

(10 Periods)

- Review of representation of natural numbers, integers, rational numbers on the number line. 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.
- Rationalization (with precise meaning) of real numbers of the type  $\frac{1}{a+b\sqrt{x}}$  and  $\frac{1}{\sqrt{x}+\sqrt{y}}$  (and their combinations) where x and y are natural number and a and b are integers.
- 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

(15) Periods

Definition of a polynomial in one variable, with examples and counter examples. Coefficients of a polynomial, terms of a polynomial and zero polynomial. Degree of a polynomial. Constant, linear, quadratic and cubic polynomials. Monomials, binomials, trinomials. Factors and multiples. Zeros of a polynomial. Factorization of  $ax^2 + bx + c$ ,  $a \neq 0$  where a, b and c are real numbers, and of cubic polynomials using the Factor Theorem.

Recall of algebraic expressions and identities. Verification of identities:

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

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

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

and their use in factorization of polynomials.

## **2. LINEAR EQUATIONS IN TWO VARIABLES**

**(10) Periods**

Recall of linear equations in one variable. Introduction to the equation in two variables.

Focus on linear equations of the type  $ax+by+c=0$ . Explain that a linear equation in two variables has infinitely many solutions and justify their being written as ordered pairs of real numbers, plotting them and showing that they lie on a line. Graph of linear equations in two variables. Examples, problems from real life with algebraic and graphical solutions being done simultaneously.

## **UNIT III: COORDINATE GEOMETRY**

### **COORDINATE GEOMETRY**

**(6) Periods**

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

## **UNIT IV: GEOMETRY**

### **1. LINES AND ANGLES**

**(13) Periods**

1. (Motivate) If a ray stands on a line, then the sum of the two adjacent angles so formed is  $180^\circ$  and the converse.
2. (Prove) If two lines intersect, vertically opposite angles are equal.
3. (Motivate) Results on corresponding angles, alternate angles, interior angles when a transversal intersects two parallel lines.
4. (Motivate) Lines which are parallel to a given line are parallel.
5. (Prove) The sum of the angles of a triangle is  $180^\circ$ .
6. (Motivate) If a side of a triangle is produced, the exterior angle so formed is equal to the sum of the two interior opposite angles.

### **2. TRIANGLES**

**(15) Periods**

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

2. (Motivate) Two triangles are congruent if the three sides of one triangle are equal to three sides of the other triangle (SSS Congruence).
3. (Motivate) Two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle. (RHS Congruence)
4. (Prove) The angles opposite to equal sides of a triangle are equal.
5. (Motivate) The sides opposite to equal angles of a triangle are equal.

#### 4. QUADRILATERALS

(10) Periods

1. (Prove) The diagonal divides a parallelogram into two congruent triangles.
2. (Motivate) In a parallelogram opposite sides are equal, and conversely.
3. (Motivate) In a parallelogram opposite angles are equal, and conversely.
4. (Motivate) A quadrilateral is a parallelogram if a pair of its opposite sides is parallel and equal.
5. (Motivate) In a parallelogram, the diagonals bisect each other and conversely.
6. (Motivate) In a triangle, the line segment joining the mid points of any two sides is parallel to the third side and in half of it and (motivate) its converse.

#### 5. CIRCLES

(12) Periods

Through examples, arrive at definition of circle and related concepts-radius, circumference, diameter, chord, arc, secant, sector, segment, subtended angle.

1. (Prove) Equal chords of a circle subtend equal angles at the center and (motivate) its converse.
2. (Motivate) The perpendicular from the center of a circle to a chord bisects the chord and conversely, the line drawn through the center of a circle to bisect a chord is perpendicular to the chord.
3. (Motivate) Equal chords of a circle (or of congruent circles) are equidistant from the center (or their respective centers) and conversely.
4. (Prove) The angle subtended by an arc at the center is double the angle subtended by it at any point on the remaining part of the circle.
5. (Motivate) Angles in the same segment of a circle are equal.
6. (Motivate) The sum of either of the pair of the opposite angles of a cyclic quadrilateral is  $180^\circ$  and its converse.

#### 6. CONSTRUCTIONS

(5) Periods

1. Construction of bisectors of line segments and angles of measure  $60^\circ$ ,  $90^\circ$ ,  $45^\circ$  etc., equilateral triangles.
2. Construction of a triangle given its base, sum/difference of the other two sides and one base angle.

## **UNIT V: MENSURATION**

### **1. AREAS**

**(2) Periods**

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

### **2. SURFACE AREAS AND VOLUMES**

**(12) Periods**

Surface areas and volumes of cubes, cuboids, spheres (including hemispheres) and right circular cylinders/cones.

## **UNIT VI: STATISTICS & PROBABILITY**

### **1. STATISTICS**

**(6) Periods**

Introduction to Statistics: Collection of data, presentation of data – tabular form, ungrouped / grouped, bar graphs

### **2. PROBABILITY**

**(9) Periods**

History, Repeated experiments and observed frequency approach to probability. Focus is on empirical probability. (A large amount of time to be devoted to group and to individual activities to motivate the concept; the experiments to be drawn from real - life situations, and from examples used in the chapter on statistics).

**MATHEMATICS**  
**QUESTION PAPER DESIGN**  
**CLASS – IX (2020-21)**

**Time: 3 Hrs.**

**Max. Marks: 80**

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

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

## COURSE STRUCTURE CLASS -X

Units	Unit Name	Marks
I	NUMBER SYSTEMS	06
II	ALGEBRA	20
III	COORDINATE GEOMETRY	06
IV	GEOMETRY	15
V	TRIGONOMETRY	12
VI	MENSURATION	10
VII	STATISTICS & PROBABILITY	11
	Total	<b>80</b>

### UNIT I: NUMBER SYSTEMS

#### 1. REAL NUMBER

(8) Periods

Fundamental Theorem of Arithmetic - statements after reviewing work done earlier and after illustrating and motivating through examples, Proofs of irrationality of  $\sqrt{2}, \sqrt{3}, \sqrt{5}$   
Decimal representation of rational numbers in terms of terminating/non-terminating recurring decimals.

### UNIT II: ALGEBRA

#### 1. POLYNOMIALS

(4) Periods

Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials.

#### 2. PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

(11) Periods

Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency.

Algebraic conditions for number of solutions. Solution of a pair of linear equations in two variables algebraically - by substitution, by elimination. Simple situational problems. Simple problems on equations reducible to linear equations.

#### 3. QUADRATIC EQUATIONS

(10) Periods

Standard form of a quadratic equation  $ax^2 + bx + c = 0$ , ( $a \neq 0$ ). Solutions of quadratic equations (only real roots) by factorization, and by using quadratic formula. Relationship between discriminant and nature of roots.

#### 4. ARITHMETIC PROGRESSIONS

(4) Periods

Motivation for studying Arithmetic Progression Derivation of the  $n^{\text{th}}$  term and sum of the first  $n$  terms of A.P.

### UNIT III: COORDINATE GEOMETRY

#### 1. LINES (In two-dimensions)

(10) Periods

**Review:** Concepts of coordinate geometry, graphs of linear equations. Distance formula. Section formula (internal division).

### UNIT IV: GEOMETRY

#### 1. TRIANGLES

(10) Periods

Definitions, examples, counter examples of similar triangles.

1. (Prove) If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.
2. (Motivate) If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side.
3. (Motivate) If in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar.
4. (Motivate) If the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar.
5. (Motivate) If one angle of a triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar.
6. (Motivate) If a perpendicular is drawn from the vertex of the right angle of a right triangle to the hypotenuse, the triangles on each side of the perpendicular are similar to the whole triangle and to each other.
7. (Prove) In a right triangle, the square on the hypotenuse is equal to the sum of the squares on the other two sides.

#### 2. CIRCLES

(8) Periods

Tangent to a circle at, point of contact

1. (Prove) The tangent at any point of a circle is perpendicular to the radius through the point of contact.
2. (Prove) The lengths of tangents drawn from an external point to a circle are equal.

### **3. CONSTRUCTIONS (4) Periods**

1. Division of a line segment in a given ratio (internally).
2. Tangents to a circle from a point outside it.

## **UNIT V: TRIGONOMETRY**

### **1. INTRODUCTION TO TRIGONOMETRY (8) Periods**

Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined). Values of the trigonometric ratios of  $30^\circ$ ,  $45^\circ$  and  $60^\circ$ . Relationships between the ratios.

### **2. TRIGONOMETRIC IDENTITIES (10) Periods**

Proof and applications of the identity  $\sin^2 A + \cos^2 A = 1$ . Only simple identities to be given.

### **3. HEIGHTS AND DISTANCES: Angle of elevation, Angle of Depression. (8) Periods**

Simple problems on heights and distances. Problems should not involve more than two right triangles. Angles of elevation / depression should be only  $30^\circ$ ,  $45^\circ$ ,  $60^\circ$ .

## **UNIT VI: MENSURATION**

### **1. AREAS RELATED TO CIRCLES (10) Periods**

Motivate the area of a circle; area of sectors and segments of a circle. Problems based on areas and perimeter / circumference of the above said plane figures. (In calculating area of segment of a circle, problems should be restricted to central angle of  $60^\circ$  and  $90^\circ$  only. Plane figures involving triangles, simple quadrilaterals and circle should be taken.)

### **2. SURFACE AREAS AND VOLUMES (8) Periods**

1. Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones.
2. Problems involving converting one type of metallic solid into another and other mixed problems. (Problems with combination of not more than two different solids be taken).

## **UNIT VII: STATISTICS AND PROBABILITY**

### **1. STATISTICS (10) Periods**

Mean, median and mode of grouped data (bimodal situation and step deviation method for finding the mean to be avoided).

### **2. PROBABILITY (10) Periods**

Classical definition of probability. Simple problems on finding the probability of an event.

**MATHEMATICS-Standard  
QUESTION PAPER DESIGN  
CLASS – X (2020-21)**

**Time : 3 Hours**

**Max. Marks: 80**

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

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

**MATHEMATICS-Basic**  
**QUESTION PAPER DESIGN**  
**CLASS – X (2020-21)**

**Time : 3Hours**

**Max. Marks: 80**

S. No.	Typology of Questions	Total Marks	% Weightage (approx.)
1	<p><b>Remembering:</b> Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.</p> <p><b>Understanding:</b> Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas</p>	60	75
2	<p><b>Applying:</b> Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.</p>	12	15
3	<p><b>Analysing :</b> Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations</p> <p><b>Evaluating:</b> Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.</p> <p><b>Creating:</b> Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions</p>	8	10
	<b>Total</b>	80	100

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

**PRESCRIBED BOOKS:**

1. Mathematics - Textbook for class IX - NCERT Publication
2. Mathematics - Textbook for class X - NCERT Publication
3. Guidelines for Mathematics Laboratory in Schools, class IX - CBSE Publication
4. Guidelines for Mathematics Laboratory in Schools, class X - CBSE Publication
5. Laboratory Manual - Mathematics, secondary stage - NCERT Publication
6. Mathematics exemplar problems for class IX, NCERT publication.
7. Mathematics exemplar problems for class X, NCERT publication.

## **SCIENCE**

**(Code No. 086)**

**Classes: IX and X (2020-21)**

The subject of Science plays an important role in developing well-defined abilities in cognitive, affective and psychomotor domains in children. It augments the spirit of enquiry, creativity, objectivity and aesthetic sensibility.

Upper primary stage demands that a number of opportunities should be provided to the students to engage them with the processes of Science like observing, recording observations, drawing, tabulation, plotting graphs, etc., whereas the secondary stage also expects abstraction and quantitative reasoning to occupy a more central place in the teaching and learning of Science. Thus, the idea of atoms and molecules being the building blocks of matter makes its appearance, as does Newton's law of gravitation.

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. Special care has been taken to avoid temptation of adding too many concepts than can be comfortably learnt in the given time frame. No attempt has been made to be comprehensive.

At this stage, while science is still a common subject, the disciplines of Physics, Chemistry and Biology begin to emerge. The students should be exposed to experiences based on hands on activities as well as modes of reasoning that are typical of the subject.

### **General Instructions:**

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:
  - a. 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, enquiry based scientific investigations etc. This will also have a weightage of 05 marks towards the final result.
  - b. Subject Enrichment in the form of Practical / Laboratory work should be done

throughout the year and the student should maintain record of the same. Practical Assessment should be continuous. There will be weightage of 5 marks towards the final result. All practicals listed in the syllabus must be completed.

- c. Portfolio to be prepared by the student- This would include classwork and other sample of student work and will carry a weightage of 5 marks towards the final results.

**COURSE STRUCTURE**  
**CLASS IX**  
**(Annual Examination)**

**Marks: 80**

Unit No.	Unit	Marks
I	Matter-Its Nature and Behaviour	27
II	Organization in the Living World	26
III	Motion, Force and Work	27
	<b>Total</b>	<b>80</b>
	<b>Internal Assessment</b>	<b>20</b>
	<b>Grand Total</b>	<b>100</b>

**Theme: Materials**

**Unit I: Matter- It's Nature and Behaviour**

**Nature of matter:** Elements, compounds and mixtures. Heterogeneous and homogeneous mixtures, colloids and suspensions.

**Particle nature and their basic units:** Atoms and molecules, Law of constant proportions, Atomic and molecular masses. Mole concept: Relationship of mole to mass of the particles and numbers.

**Structure of atoms:** Electrons, protons and neutrons, valency, chemical formula of common compounds. 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).

**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, derivation of equations of motion by graphical method; 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. 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.

**Work, energy and power:** Work done by a Force, Energy, power; Kinetic and Potential energy; Law of conservation of energy.

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### **ONLY FOR INTERNAL ASSESSMENT**

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

**Theme: Natural Resources: Balance in nature**

**Unit IV: Our Environment**

**Physical resources:** Air, Water, Soil. Air for respiration, for combustion, for moderating temperatures; movements of air and its role in bringing rains across India.

Air, water and soil pollution (brief introduction). Holes in ozone layer and the probable damages.

**Bio-geo chemical cycles in nature:** Water, Oxygen, Carbon and Nitrogen.

## PRACTICALS

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

### (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 compoundusing iron filings and sulphur powder and distinguishing between these on the basis of:
  - (i) appearance, i.e., homogeneity and heterogeneity
  - (ii) behaviour towards a magnet
  - (iii) behaviour towards carbon disulphide as a solvent
  - (iv) effect of heat
  
3. Perform the following reactions and classify them as physical or chemical changes: **Unit-I**
  - a) Iron with copper sulphate solution in water
  - b) Burning of magnesium ribbon in air
  - c) Zinc with dilute sulphuric acid
  - d) Heating of copper sulphate crystals
  - e) Sodium sulphate with barium chloride in the form of their solutions in water
  
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 density of solid (denser than water) by using a spring balance and a measuring cylinder. **Unit-III**
  
7. Establishing the relation between the loss in weight of a solid when fully immersed in
  - a) Tap water **Unit-III**
  - b) Strongly salty water with the weight of water displaced by it by taking at least two different solids.

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

**Unit-III**

**COURSE STRUCTURE CLASS X**  
**(Annual Examination)**

**Marks: 80**

<b>Unit No.</b>	<b>Unit</b>	<b>Marks</b>
I	Chemical Substances-Nature and Behaviour	26
II	World of Living	23
III	Natural Phenomena	12
IV	Effects of Current	14
V	Natural Resources	05
	<b>Total</b>	<b>80</b>
	<b>Internal assessment</b>	<b>20</b>
	<b>Grand Total</b>	<b>100</b>

**Theme: Materials**

**Unit I: Chemical Substances - Nature and Behaviour**

**Chemical reactions:** Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation and reduction.

**Acids, bases and salts:** Their definitions in terms of furnishing of  $H^+$  and  $OH^-$  ions, General properties, examples and uses, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.

**Metals and nonmetals:** Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds.

**Carbon compounds:** Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series.

**Periodic classification of elements:** Need for classification, early attempts at classification of elements (Dobereiner's Triads, Newland's Law of Octaves, Mendeleev's Periodic Table), Modern periodic table, gradation in properties, valency, atomic number, metallic and non-metallic properties.

**Theme: The World of the Living**

**Unit II: World of Living**

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

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

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

## **Theme: Natural Phenomena**

### **Unit III: Natural Phenomena**

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

Refraction; Laws of refraction, refractive index.

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

Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.

## **Theme: How Things Work**

### **Unit IV: Effects of Current**

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

**Magnetic effects of current :** Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left Hand Rule, Electric Motor, Electromagnetic induction. Induced potential difference, Induced current. Fleming's Right Hand Rule.

## **Theme: Natural Resources**

### **Unit V: Natural Resources**

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

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### **ONLY FOR INTERNAL ASSESSMENT**

***Note: Learners are assigned to read the below listed part of Unit V. They can be encouraged to prepare a brief write up on any one concept of this Unit in their Portfolio. This may be an assessment for Internal Assessment and credit may be given (Periodic***

**assessment/Portfolio). This portion of the Unit is not to be assessed in the year-end examination.**

**Management of natural resources:** Conservation and judicious use of natural resources. Forest and wild life; Coal and Petroleum conservation. Examples of people's participation for conservation of natural resources. Big dams: advantages and limitations; alternatives, if any. Water harvesting. Sustainability of natural resources.

## PRACTICALS

Practical should be conducted alongside the concepts taught in theory classes

### LIST OF EXPERIMENTS

- Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with
  - Litmus solution (Blue/Red) **Unit-I**
  - Zinc metal
  - Solid sodium carbonate
- Performing and observing the following reactions and classifying them into: **Unit-I**
  - Combination reaction
  - Decomposition reaction
  - Displacement reaction
  - Double displacement reaction
    - Action of water on quicklime
    - Action of heat on ferrous sulphate crystals
    - Iron nails kept in copper sulphate solution
    - Reaction between sodium sulphate and barium chloride solutions
- Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions: **Unit-I**
  - ZnSO<sub>4</sub>(aq)
  - FeSO<sub>4</sub>(aq)
  - CuSO<sub>4</sub>(aq)
  - Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>(aq)

Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.
- Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determining its resistance. Also plotting a graph between V and I. **Unit-IV**
- Experimentally show that carbon dioxide is given out during respiration. **Unit-II**
- Determination of the focal length of (i) Concave mirror and (ii) Convex lens by obtaining the image of a distant object. **Unit-III**
- Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result. **Unit - III**
- Studying (a) binary fission in *Amoeba*, and (b) budding in yeast and Hydra with the help of prepared slides. **Unit-II**
- Tracing the path of the rays of light through a glass prism. **Unit-III**

### PRESCRIBED BOOKS:

- Science-Textbook for class IX-NCERT Publication
- Science-Text book for class X- NCERT Publication
- Assessment of Practical Skills in Science-Class IX - CBSE Publication
- Assessment of Practical Skills in Science- Class X- CBSE Publication
- Laboratory Manual-Science-Class IX, NCERT Publication
- Laboratory Manual-Science-Class X, NCERT Publication
- Exemplar Problems Class IX – NCERT Publication
- Exemplar Problems Class X – NCERT Publication

**Assessment Areas (Theory) 2020-21**  
(Class X)  
**Science (086)**

**Time: 3 hrs.**

**Maximum Marks: 80 Marks**

<b>Competencies</b>	
<b>Demonstrate Knowledge and Understanding</b>	46 %
<b>Application of Knowledge/Concepts</b>	22 %
<b>Analyze, Evaluate and Create</b>	32 %

**Note:**

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

**Internal Assessment (20 Marks)**

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

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**Suggestive verbs for various competencies**

- **Demonstrate Knowledge and Understanding**  
State, name, list, identify, define, suggest, describe, outline, summarize, etc.
- **Application of Knowledge/Concepts**  
Calculate, illustrate, show, adapt, explain, distinguish, etc.
- **Analyze, Evaluate and Create**  
Interpret, analyze, compare, contrast, examine, evaluate, discuss, construct, etc.

**SOCIAL SCIENCE**  
**CLASS IX-X (2020-21)**  
**(CODE NO. 087)**  
**REVISED CURRICULUM**

## **Rationale**

Social Science is a compulsory subject up to secondary stage of school education. It is an integral component of general education because it helps the learners to understand the environment in its totality and developing a broader perspective and an empirical, reasonable and humane outlook. This is of crucial importance because it helps them grow into well-informed and responsible citizens with necessary attributes and skills for being able to participate and contribute effectively in the process of development and nation-building.

The Social Science curriculum draws its content mainly from History, Geography, Political Science and Economics. Together they provide a comprehensive view of society over space and time, and in relation to each other. Each subject's distinct methods of enquiry help the learners to understand society from different angles and form a holistic view.

## **Objectives**

The main objectives of this syllabus are to:

- develop an understanding of the processes of change and development-both in terms of time and space, through which human societies have evolved
- make learners realize that the process of change is continuous and any event or phenomenon or issue cannot be viewed in isolation but in a wider context of time and space
- develop an understanding of contemporary India with its historical perspective, of the basic framework of the goals and policies of national development in independent India, and of the process of change with appropriate connections to world development
- deepen knowledge about and understanding of India's freedom struggle and of the values and ideals that it represented, and to develop an appreciation of the contributions made by people of all sections and regions of the country
- help learners understand and cherish the values enshrined in the Indian Constitution and to prepare them for their roles and responsibilities as effective citizens of a democratic society
- deepen the knowledge and understanding of India's environment in its totality, their interactive processes and effects on the future quality of people's lives

- facilitate the learners to understand and appreciate the diversity in the land and people of the country with its underlying unity
- develop an appreciation of the richness and variety of India’s heritage-both natural and cultural and the need for its preservation
- promote an understanding of the issues and challenges of contemporary India-environmental, economic and social, as part of the development process
- help pupils acquire knowledge, skills and understanding to face the challenges of contemporary society as individuals and groups and learn the art of living a confident and stress-free life as well as participating effectively in the community
- develop scientific temperament by promoting the spirit of enquiry and following a rational and objective approach in analysing and evaluating data and information as well as views and interpretations
- develop academic and social skills such as critical thinking, communicating effectively both in visual and verbal forms - cooperating with others, taking initiatives and providing leadership in solving others’ problems
- develop qualities clustered around the personal, social, moral, national and spiritual values that make a person humane and socially effective.

### COURSE STRUCTURE CLASS IX (2020-21)

#### Theory Paper

Time: 3 Hrs.			Max. Marks: 80
No.	Units	No. of Periods	Marks
I	India and the Contemporary World – I	46	20
II	Contemporary India – I	37	20
III	Democratic Politics – I	37	20
IV	Economics	37	20
<b>Total</b>		<b>157</b>	<b>80</b>

### COURSE CONTENT

Unit 1: India and the Contemporary World – I		46 Periods
Themes	Learning Objectives	
<b>Section 1: Events and Processes: (All the three themes are compulsory)</b>	In each of the themes in this unit students would get familiarized with distinct ideologies, extracts of speeches, political declarations, as well as the politics of caricatures, posters and engravings. Students	

<p><b>I. The French Revolution</b></p> <ul style="list-style-type: none"> <li>• French Society During the Late Eighteenth Century</li> <li>• The Outbreak of the Revolution</li> <li>• France Abolishes Monarchy and Becomes a Republic</li> <li>• Did Women have a Revolution?</li> <li>• The Abolition of Slavery</li> <li>• The Revolution and Everyday Life</li> </ul> <p><b>II. Socialism in Europe and the Russian Revolution</b></p> <ul style="list-style-type: none"> <li>• The Age of Social Change</li> <li>• The Russian Revolution</li> <li>• The February Revolution in Petrograd</li> <li>• What Changed after October?</li> <li>• The Global Influence of the Russian Revolution and the USSR</li> </ul> <p><b>III. Nazism and the Rise of Hitler</b></p> <ul style="list-style-type: none"> <li>• Birth of the Weimar Republic</li> <li>• Hitler's Rise to Power</li> <li>• The Nazi Worldview</li> <li>• Youth in Nazi Germany</li> <li>• Ordinary People and the Crimes Against Humanity</li> </ul>	<p>would learn how to interpret these kinds of historical evidences.</p> <ul style="list-style-type: none"> <li>• Familiarize with the names of people involved, the different types of ideas that inspired the revolution, the wider forces that shaped it.</li> <li>• Know the use of written, oral and visual material to recover the history of revolutions.</li> </ul> <ul style="list-style-type: none"> <li>• Explore the history of socialism through the study of Russian Revolution.</li> <li>• Familiarize with the different types of ideas that inspired the revolution.</li> </ul> <ul style="list-style-type: none"> <li>• Discuss the critical significance of Nazism in shaping the politics of modern world.</li> <li>• Get familiarized with the speeches and writings of Nazi Leaders.</li> </ul>
<p><b>Unit 2: Contemporary India – I</b> <span style="float: right;"><b>37 Periods</b></span></p>	
<p><b>Themes</b></p>	<p><b>Learning Objectives</b></p>
<p><b>1. India</b></p> <ul style="list-style-type: none"> <li>• Size and Location</li> <li>• India and the World</li> <li>• India's Neighbours</li> </ul> <p><b>2. Physical Features of India</b></p> <ul style="list-style-type: none"> <li>• Major Physiographic Divisions</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the location of India in the Indian subcontinent.</li> </ul> <ul style="list-style-type: none"> <li>• Understand the major landform features and the underlying geological structure; their</li> </ul>

<p><b>3.Drainage</b></p> <p><i>Note: Only Map Items as given in the Map List from this chapter to be evaluated in Examination.</i></p> <p><b>4.Climate</b></p> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Climatic Controls</li> <li>• Factors influencing India's climate</li> <li>• The Indian Monsoon</li> <li>• Distribution of Rainfall</li> <li>• Monsoon as a unifying bond</li> </ul> <p><b>5.Natural Vegetation and Wild Life</b></p> <ul style="list-style-type: none"> <li>• Factors affecting Vegetation</li> <li>• Vegetation types</li> <li>• Wild Life</li> <li>• Conservation</li> </ul>	<p>association with various rocks and minerals as well as nature of soil types.</p> <ul style="list-style-type: none"> <li>• Identify the river systems of the country.</li> <li>• Identify various factors influencing the climate and explain the climatic variation of our country and its impact on the life of people.</li> <li>• Explain the importance and unifying role of monsoons</li> <li>• Explain the nature of diverse flora and fauna as well as their distribution.</li> <li>• Develop concern about the need to protect the biodiversity of our country.</li> </ul>
<p><b>Unit 3: Democratic Politics – I</b> <span style="float: right;"><b>37 Periods</b></span></p>	
<p><b>Themes</b></p>	<p><b>Learning Objectives</b></p>
<p><b>1. What is Democracy? Why Democracy?</b></p> <ul style="list-style-type: none"> <li>• What is Democracy?</li> <li>• Features of Democracy</li> <li>• Why Democracy?</li> <li>• Broader Meaning of Democracy</li> </ul>	<ul style="list-style-type: none"> <li>• Develop conceptual skills of defining democracy.</li> <li>• Understand how different historical processes and forces have promoted democracy.</li> <li>• Develop a sophisticated defense of democracy against common prejudices.</li> <li>• Develop a historical sense of the choice and nature of democracy in India.</li> </ul>

<p><b>2. Constitutional Design</b></p> <ul style="list-style-type: none"> <li>• Why do we need a Constitution?</li> <li>• Making of the Indian Constitution</li> <li>• Guiding Values of the Indian Constitution</li> </ul> <p><b>3. Electoral Politics</b></p> <ul style="list-style-type: none"> <li>• Why Elections?</li> <li>• What is our System of Elections?</li> <li>• What makes elections in India democratic?</li> </ul> <p><b>4. Working of Institutions</b></p> <ul style="list-style-type: none"> <li>• How is the major policy decision taken?</li> <li>• Parliament</li> <li>• Political Executive</li> <li>• Judiciary</li> </ul>	<ul style="list-style-type: none"> <li>• Understand the process of Constitution making.</li> <li>• Develop respect for the Constitution and appreciation for Constitutional values.</li> <li>• Recognize Constitution as a dynamic and living document.</li> <li>• Understand representative democracy via competitive party politics.</li> <li>• Familiarize with Indian electoral system.</li> <li>• Reason out for the adoption of present Indian Electoral System.</li> <li>• Develop an appreciation of citizen's increased participation in electoral politics.</li> <li>• Recognize the significance of the Election Commission.</li> <li>• Get an overview of central governmental structures.</li> <li>• Identify the role of Parliament and its procedures.</li> <li>• Distinguish between political and permanent executive authorities and functions.</li> <li>• Understand the parliamentary system of executive's accountability to the legislature.</li> <li>• Understand the working of Indian Judiciary.</li> </ul>
<b>Unit 4: Economics</b>	<b>37 Periods</b>
<b>Themes</b>	<b>Objectives</b>

<p><b>1. The Story of Village Palampur</b></p> <ul style="list-style-type: none"> <li>• Overview</li> <li>• Organization of production</li> <li>• Farming in Palampur</li> <li>• Non-farm activities of Palampur</li> </ul> <p><b>2. People as Resource</b></p> <ul style="list-style-type: none"> <li>• Overview</li> <li>• Economic activities by men and women</li> <li>• Quality of Population</li> <li>• Unemployment</li> </ul> <p><b>3. Poverty as a Challenge</b></p> <ul style="list-style-type: none"> <li>• Two typical cases of poverty</li> <li>• Poverty as seen by Social Scientists</li> <li>• Poverty Estimates</li> <li>• Vulnerable Groups</li> <li>• Interstate disparities</li> <li>• Global Poverty Scenario</li> <li>• Causes of Poverty</li> <li>• Anti-poverty measures</li> <li>• The Challenges Ahead</li> </ul>	<ul style="list-style-type: none"> <li>• Familiarize with basic economic concepts through an imaginary story of a village.</li> </ul> <ul style="list-style-type: none"> <li>• Understand the demographic concepts.</li> <li>• Understand how population can be an asset or a liability for a nation.</li> </ul> <ul style="list-style-type: none"> <li>• Understand poverty as a challenge.</li> <li>• Identify vulnerable group and interstate disparities</li> <li>• Appreciate the initiatives of the government to alleviate poverty.</li> </ul>
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**PROJECT WORK  
CLASS IX (2020-21)**

<b>05 Periods</b>	<b>05 Marks</b>
<p>1. Every student has to compulsorily undertake <b>one project on Disaster Management.</b></p> <p>2. <b>Objectives:</b> The main objectives of giving project work on Disaster Management to the students are to:</p> <ol style="list-style-type: none"> <li>a. create awareness in them about different disasters, their consequences and management</li> <li>b. prepare them in advance to face such situations</li> <li>c. ensure their participation in disaster mitigation plans</li> <li>d. enable them to create awareness and preparedness among the community.</li> </ol> <p>3. The project work should also help in enhancing the Life Skills of the students.</p>	

4. If possible, ***different forms of art*** may be integrated in the project work.

5. In order to realize the expected objectives completely, it would be required of the Principals / teachers to muster support from various local authorities and organizations like the Disaster Management Authorities, Relief, Rehabilitation and the Disaster Management Departments of the States, Office of the District Magistrate/ Deputy Commissioners, Fire Service, Police, Civil Defense etc. in the area where the schools are located.

6. The ***distribution of marks*** over different aspects relating to Project Work is as follows:

<b>S. No.</b>	<b>Aspects</b>	<b>Marks</b>
a	Content accuracy, originality and analysis	<b>2</b>
b	Presentation and creativity	<b>2</b>
c	Viva Voce	<b>1</b>

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

8. All documents pertaining to assessment under this activity should be meticulously maintained by the schools.

9. A Summary Report should be prepared highlighting:

- a. objectives realized through individual work and group interactions;
- b. calendar of activities;
- c. innovative ideas generated in the process ;
- d. list of questions asked in viva voce.

10. It is to be noted here by all the teachers and students that the projects and models prepared should be made from eco-friendly products without incurring too much expenditure.

11. The Project Report should be handwritten by the students themselves.

12. The record of the project work (internal assessment) should be kept for a period of three months for verification, if any.

## **PRESCRIBED BOOKS:**

1. India and the Contemporary World - I (History) - Published by NCERT
2. Contemporary India - I (Geography) - Published by NCERT
3. Democratic Politics - I Published by NCERT
4. Economics - Published by NCERT
5. Together, Towards a Safer India - Part II, a textbook on Disaster Management for Class IX - Published by CBSE
6. Learning outcomes at Secondary stage Published by NCERT

***Note: Please procure latest reprinted edition (2020) of prescribed NCERT textbooks.***

**SOCIAL SCIENCE (CODE NO. 087)**  
**QUESTION PAPER DESIGN**  
**CLASS IX (2020-21)**

<b>Time: 3 Hours</b>		<b>Maximum Marks: 80</b>	
<b>Sr. No.</b>	<b>Competencies</b>	<b>Total Marks</b>	<b>% Weightage</b>
1	<b>Remembering and Understanding:</b> Exhibiting memory of previously learned material by recalling facts, terms, basic concepts, and answers; Demonstrating understanding of facts and ideas by organizing, translating, interpreting, giving descriptions and stating main ideas	28	35%
2	<b>Applying:</b> Solving problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	15	18.75%
3	<b>Formulating, Analysing, Evaluating and Creating:</b> Examining and breaking information into parts by identifying motives or causes; Making inferences and finding evidence to support generalizations; Presenting and defending opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria; Compiling information together in a different way by combining elements in a new pattern or proposing alternative solutions.	32	40%
4	<b>Map Skill</b>	5	6.25%
		<b>80</b>	<b>100%</b>

**Note:**

1. Teachers may refer 'Learning Outcomes' published by NCERT for developing lesson plans, assessment framework and questions.
2. 02 Items from History Map List and 03 Items from Geography Map List

**Internal Assessment: 20 Marks**

## INTERNAL ASSESSMENT

	Marks	Description				
Periodic Assessment	10 Marks	<table border="1" style="width: 100%;"> <tr> <td style="width: 70%;">Pen Paper Test</td> <td style="text-align: center;"><b>5 marks</b></td> </tr> <tr> <td>Assessment using multiple strategies For example, Quiz, Debate, Role Play, Viva, Group Discussion, Visual Expression, Interactive Bulletin Boards, Gallery Walks, Exit Cards, Concept Maps, Peer Assessment, Self-Assessment, etc.</td> <td style="text-align: center;"><b>5 marks</b></td> </tr> </table>	Pen Paper Test	<b>5 marks</b>	Assessment using multiple strategies For example, Quiz, Debate, Role Play, Viva, Group Discussion, Visual Expression, Interactive Bulletin Boards, Gallery Walks, Exit Cards, Concept Maps, Peer Assessment, Self-Assessment, etc.	<b>5 marks</b>
Pen Paper Test	<b>5 marks</b>					
Assessment using multiple strategies For example, Quiz, Debate, Role Play, Viva, Group Discussion, Visual Expression, Interactive Bulletin Boards, Gallery Walks, Exit Cards, Concept Maps, Peer Assessment, Self-Assessment, etc.	<b>5 marks</b>					
Portfolio	5 Marks	<ul style="list-style-type: none"> <li>• Classwork and Assignments</li> <li>• Any exemplary work done by the student</li> <li>• Reflections, Narrations, Journals, etc.</li> <li>• Achievements of the student in the subject throughout the year</li> <li>• Participation of the student in different activities like Heritage India Quiz</li> </ul>				
Subject Enrichment Activity	5 Marks	<ul style="list-style-type: none"> <li>• Project Work</li> </ul>				

## LIST OF MAP ITEMS CLASS IX (2020-21)

### SUBJECT - HISTORY

#### Chapter-1: The French Revolution

Outline Political Map of France (For locating and labeling / Identification)

- Bordeaux
- Nantes
- Paris
- Marseilles

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

Outline Political Map of World (For locating and labeling / Identification)

- Major countries of First World War

(Central Powers and Allied Powers)

**Central Powers** - Germany, Austria-Hungary, Turkey (Ottoman Empire)

**Allied Powers** - France, England, Russia, U.S.A.

### **Chapter-3: Nazism and Rise of Hitler**

Outline Political Map of World (For locating and labeling / Identification)

- Major countries of Second World War  
**Axis Powers** – Germany, Italy, Japan  
**Allied Powers** – UK, France, Former USSR, USA
- Territories under German expansion (Nazi Power)  
Austria, Poland, Czechoslovakia (only Slovakia shown in the map), Denmark, Lithuania, France, Belgium

**SUBJECT – GEOGRAPHY** (Outline Political Map of India)

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

- India-States with Capitals, Tropic of Cancer, Standard Meridian (Location and Labelling)

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

- Mountain Ranges: The Karakoram, The Zasker, The Shivalik, The Aravali, The Vindhya, The Satpura, Western & Eastern Ghats
- Mountain Peaks – K2, Kanchan Junga, Anai Mudi
- Plateau - Deccan Plateau, Chotta Nagpur Plateau, Malwa Plateau
- Coastal Plains - Konkan, Malabar, Coromandal & Northern Circar (Location and Labelling)

### **Chapter - 3: Drainage**

**Note: Only map items of this chapter as listed below to be evaluated in Examination.**

#### **Rivers: (Identification only)**

- The Himalayan River Systems-The Indus, The Ganges, and The Satluj
- The Peninsular rivers-The Narmada, The Tapi, The Kaveri, The Krishna,
- The Godavari, The Mahanadi

**Lakes:** Wular, Pulicat, Sambhar, Chilika

## **Chapter - 4: Climate**

- Areas receiving rainfall less than 20 cm and over 400 cm (Identification only)

## **Chapter - 5: Natural Vegetation and Wild Life**

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

**COURSE STRUCTURE**  
**CLASS X (2020-21)**

**Theory Paper**

<b>Time: 3 Hrs.</b>		<b>Max. Marks: 80</b>	
<b>No.</b>	<b>Units</b>	<b>No. of Periods</b>	<b>Marks</b>
I	India and the Contemporary World – II	46	20
II	Contemporary India – II	34	20
III	Democratic Politics - II	27	20
IV	Understanding Economic Development	44	20
<b>Total</b>		<b>151</b>	<b>80</b>

**COURSE CONTENT**

<b>Unit 1: India and the Contemporary World – II</b>		<b>46 Periods</b>
<b>Themes</b>	<b>Learning Objectives</b>	
<b>Section 1: Events and Processes</b>		
<b>1. The Rise of Nationalism in Europe</b> <ul style="list-style-type: none"> <li>• The French Revolution and the Idea of the Nation</li> <li>• The Making of Nationalism in Europe</li> <li>• The Age of Revolutions: 1830-1848</li> <li>• The Making of Germany and Italy</li> <li>• Visualizing the Nation</li> <li>• Nationalism and Imperialism</li> </ul>	<ul style="list-style-type: none"> <li>• Enable the learners to identify and comprehend the forms in which nationalism developed along with the formation of nation states in Europe in the post-1830 period.</li> <li>• Establish the relationship and bring out the difference between European nationalism and anti-colonial nationalisms.</li> <li>• Understand the way the idea of nationalism emerged and led to the formation of nation states in Europe and elsewhere.</li> </ul>	
<b>2. Nationalism in India</b> <ul style="list-style-type: none"> <li>• The First World War, Khilafat and Non - Cooperation</li> <li>• Differing Strands within the Movement</li> <li>• Towards Civil Disobedience</li> <li>• The Sense of Collective Belonging</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize the characteristics of Indian nationalism through a case study of Non-Cooperation and Civil Disobedience Movement.</li> <li>• Analyze the nature of the diverse social movements of the time.</li> <li>• Familiarize with the writings and ideals of different political groups and individuals.</li> </ul>	

<p><b>Section 2: Livelihoods, Economies and Societies:</b></p> <p><b>Note: Any one theme of the following. The theme selected should be assessed in the Periodic Tests only and will not be evaluated in Board Examination.</b></p> <p><b>3. The Making of a Global World</b></p> <ul style="list-style-type: none"> <li>• The Pre-modern world</li> <li>• The Nineteenth Century (1815-1914)</li> <li>• The Inter war Economy</li> <li>• Rebuilding a World Economy: The Post-War Era</li> </ul> <p><b>4. The Age of Industrialization</b></p> <ul style="list-style-type: none"> <li>• Before the Industrial Revolution</li> <li>• Hand Labour and Steam Power</li> <li>• Industrialization in the colonies</li> <li>• Factories Come Up</li> <li>• The Peculiarities of Industrial Growth</li> <li>• Market for Goods</li> </ul>	<ul style="list-style-type: none"> <li>• Appreciate the ideas promoting Pan Indian belongingness.</li> <li>• Show that globalization has a long history and point to the shifts within the process.</li> <li>• Analyze the implication of globalization for local economies.</li> <li>• Discuss how globalization is experienced differently by different social groups.</li> <li>• Familiarize with the Pro- to-Industrial phase and Early – factory system.</li> <li>• Familiarize with the process of industrialization and its impact on labour class.</li> <li>• Enable them to understand industrialization in the colonies with reference to Textile industries.</li> </ul>
<p><b>Unit 2: Contemporary India – II</b> <span style="float: right;"><b>34 Periods</b></span></p>	
<p><b>Themes</b></p>	<p><b>Learning Objectives</b></p>
<p><b>1. Resources and Development</b></p> <ul style="list-style-type: none"> <li>• Types of Resources</li> <li>• Development of Resources</li> <li>• Resource Planning in India</li> <li>• Land Resources</li> <li>• Land Utilization</li> <li>• Land Use Pattern in India</li> <li>• Land Degradation and Conservation Measures</li> <li>• Soil as a Resource</li> </ul>	<ul style="list-style-type: none"> <li>• Understand the value of resources and the need for their judicious utilization and conservation.</li> </ul>

<ul style="list-style-type: none"> <li>• Classification of Soils</li> <li>• Soil Erosion and Soil Conservation</li> </ul> <p><b>3. Water Resources</b></p> <p><i>Note: The theoretical aspect of this chapter will not be assessed in Periodic Tests and Board Examination. Only Map Items as given in the Map List from this chapter will be evaluated in Board Examination.</i></p> <p><b>4. Agriculture</b></p> <ul style="list-style-type: none"> <li>• Types of farming</li> <li>• Cropping Pattern</li> <li>• Major Crops</li> <li>• Technological and Institutional Reforms</li> <li>• Impact of Globalization on Agriculture</li> </ul> <p><b>5. Minerals</b></p> <p><i>Note: The theoretical aspect of this chapter will not be assessed in Periodic Tests and Board Examination. Only Map items as given in map list from this chapter will be evaluated in Board Examination.</i></p> <p><b>6. Manufacturing Industries</b></p> <ul style="list-style-type: none"> <li>• Importance of manufacturing</li> <li>• Contribution of Industry to National Economy</li> <li>• Industrial Location</li> <li>• Classification of Industries</li> <li>• Spatial distribution</li> </ul>	<ul style="list-style-type: none"> <li>• Identify different dams in the country</li> <li>• Explain the importance of agriculture in national economy.</li> <li>• Identify various types of farming and discuss the various farming methods; describe the spatial distribution of major crops as well as understand the relationship between rainfall regimes and cropping pattern.</li> <li>• Explain various government policies for institutional as well as technological reforms since independence.</li> <li>• Identify places of availability of different energy resources.</li> <li>• Bring out the importance of industries in the national economy as well as understand the regional disparities which resulted due to concentration of industries in some areas.</li> </ul>
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<ul style="list-style-type: none"> <li>• Industrial pollution and environmental degradation</li> <li>• Control of Environmental Degradation</li> </ul> <p><b>7. Life Lines of National Economy</b></p> <ul style="list-style-type: none"> <li>• Transport – Roadways, Railways, Pipelines, Waterways, Airways</li> <li>• Communication</li> <li>• International Trade</li> <li>• Tourism as a Trade</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss the need for a planned industrial development and debate over the role of government towards sustainable development.</li> <li>• Explain the importance of transport and communication in the ever-shrinking world.</li> <li>• Understand the role of trade and tourism in the economic development of a country.</li> </ul>
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<b>Unit 3: Democratic Politics – II</b>	<b>27 Periods</b>
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<b>Themes</b>	<b>Learning Objectives</b>
<p><b>1. Power Sharing</b></p> <ul style="list-style-type: none"> <li>• Case Studies of Belgium and Sri Lanka</li> <li>• Why power sharing is desirable?</li> <li>• Forms of Power Sharing</li> </ul> <p><b>2. Federalism</b></p> <ul style="list-style-type: none"> <li>• What is Federalism?</li> <li>• What make India a Federal Country?</li> <li>• How is Federalism practiced?</li> <li>• Decentralization in India</li> </ul> <p><b>6. Political Parties</b></p> <ul style="list-style-type: none"> <li>• Why do we need Political Parties?</li> <li>• How many Parties should we have?</li> <li>• National Political Parties</li> <li>• State Parties</li> <li>• Challenges to Political Parties</li> <li>• How can Parties be reformed?</li> </ul> <p><b>7. Outcomes of Democracy</b></p> <ul style="list-style-type: none"> <li>• How do we assess democracy's outcomes?</li> </ul>	<ul style="list-style-type: none"> <li>• Familiarize with the centrality of power sharing in a democracy.</li> <li>• Understand the working of spatial and social power sharing mechanisms.</li> <li>• Analyse federal provisions and institutions.</li> <li>• Explain decentralization in rural and urban areas.</li> <li>• Analyse party systems in democracies.</li> <li>• Introduction to major political parties, challenges faced by them and reforms in the country.</li> <li>• Evaluate the functioning of democracies in comparison to alternative forms of governments.</li> </ul>

<ul style="list-style-type: none"> <li>• Accountable, responsive and legitimate government</li> <li>• Economic growth and development</li> <li>• Reduction of inequality and poverty</li> <li>• Accommodation of social diversity</li> <li>• Dignity and freedom of the citizens</li> </ul>	<ul style="list-style-type: none"> <li>• Understand the causes for continuation of democracy in India.</li> <li>• Distinguish between sources of strengths and weaknesses of Indian democracy.</li> </ul>
<b>Unit 4: Understanding Economic Development</b>	
<b>44 Periods</b>	
<b>Themes</b>	<b>Objectives</b>
<p><b>1. Development</b></p> <ul style="list-style-type: none"> <li>• What Development Promises - Different people different goals</li> <li>• Income and other goals</li> <li>• National Development</li> <li>• How to compare different countries or states?</li> <li>• Income and other criteria</li> <li>• Public Facilities</li> <li>• Sustainability of development</li> </ul> <p><b>2. Sectors of the Indian Economy</b></p> <ul style="list-style-type: none"> <li>• Sectors of Economic Activities</li> <li>• Comparing the three sectors</li> <li>• Primary, Secondary and Tertiary Sectors in India</li> <li>• Division of sectors as organized and unorganized</li> <li>• Sectors in terms of ownership: Public and Private Sectors</li> </ul> <p><b>3. Money and Credit</b></p> <ul style="list-style-type: none"> <li>• Money as a medium of exchange</li> <li>• Modern forms of money</li> <li>• Loan activities of Banks</li> <li>• Two different credit situations</li> <li>• Terms of credit</li> <li>• Formal sector credit in India</li> <li>• Self Help Groups for the Poor</li> </ul> <p><b>4. Globalization and the Indian Economy</b></p>	<ul style="list-style-type: none"> <li>• Familiarize with concepts of macroeconomics.</li> <li>• Understand the rationale for overall human development in our country, which includes the rise of income, improvements in health and education rather than income.</li> <li>• Understand the importance of quality of life and sustainable development.</li> <li>• Identify major employment generating sectors.</li> <li>• Reason out the government investment in different sectors of economy.</li> <li>• Understand money as an economic concept.</li> <li>• Understand the role of financial institutions from the point of view of day-to- day life.</li> </ul>

<ul style="list-style-type: none"> <li>• Production across countries</li> <li>• Interlinking production across countries</li> <li>• Foreign Trade and integration of markets</li> <li>• What is globalization?</li> <li>• Factors that have enabled Globalisation</li> <li>• World Trade Organisation</li> <li>• Impact of Globalization on India</li> <li>• The Struggle for a fair Globalization</li> </ul>	<ul style="list-style-type: none"> <li>• Explain the working of the Global Economic phenomenon.</li> </ul>
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**PROJECT WORK  
CLASS X (2020-21)**

<b>05 Periods</b>	<b>05 Marks</b>
<p>1. <b>Every student</b> has to compulsorily undertake <b>any one project</b> on the following topics:</p> <p style="text-align: center;">Consumer Awareness <b>OR</b> Social Issues <b>OR</b> Sustainable Development</p> <p>2. <b>Objective:</b> The overall objective of the project work is to help students gain an insight and pragmatic understanding of the theme and see all the Social Science disciplines from interdisciplinary perspective. It should also help in enhancing the Life Skills of the students.</p> <p>Students are expected to apply the Social Science concepts that they have learnt over the years in order to prepare the project report.</p> <p>If required, students may go out for collecting data and use different primary and secondary resources to prepare the project. If possible, <b>different forms of art</b> may be integrated in the project work.</p> <p>3. The distribution of marks over different aspects relating to Project Work is as follows:</p>	

S. No.	Aspects	Marks
a.	Content accuracy, originality and analysis	2
b.	Presentation and creativity	2
c.	Viva Voce	1

4. The projects carried out by the students in different topics should subsequently be shared among themselves through interactive sessions such as exhibitions, panel discussions, etc.

5. All documents pertaining to assessment under this activity should be meticulously maintained by concerned schools.

6. A Summary Report should be prepared highlighting:

- objectives realized through individual work and group interactions;
- calendar of activities;
- innovative ideas generated in the process ;
- list of questions asked in viva voce.

7. It is to be noted here by all the teachers and students that the projects and models prepared should be made from eco-friendly products without incurring too much expenditure.

8. The Project Report should be handwritten by the students themselves.

9. Records pertaining to projects (internal assessment) of the students will be maintained for a period of three months from the date of declaration of result for verification at the discretion of Board. Subjudiced cases, if any or those involving RTI / Grievances may however be retained beyond three months.

#### **PRESCRIBED BOOKS:**

1. India and the Contemporary World-II (History) - Published by NCERT
2. Contemporary India II (Geography) - Published by NCERT
3. Democratic Politics II (Political Science) - Published by NCERT
4. Understanding Economic Development - Published by NCERT
5. Together Towards a Safer India - Part III, a textbook on Disaster Management - Published by CBSE
6. Learning Outcomes at the Secondary Stage – Published by NCERT

**Note: Please procure latest reprinted edition (2020) of prescribed NCERT textbooks.**

**SOCIAL SCIENCE (CODE NO. 087)**  
**QUESTION PAPER DESIGN**  
**CLASS X (2020-21)**

<b>Time: 3 Hours</b>		<b>Maximum Marks : 80</b>	
<b>Sr. No.</b>	<b>Competencies</b>	<b>Total Marks</b>	<b>% Weightage</b>
1	<b>Remembering and Understanding:</b> Exhibiting memory of previously learned material by recalling facts, terms, basic concepts, and answers; Demonstrating understanding of facts and ideas by organizing, translating, interpreting, giving descriptions and stating main ideas.	28	35%
2	<b>Applying:</b> Solving problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	15	18.75%
3	<b>Formulating, Analysing, Evaluating and Creating:</b> Examining and breaking information into parts by identifying motives or causes; Making inferences and finding evidence to support generalizations; Presenting and defending opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria; Compiling information together in a different way by combining elements in a new pattern or proposing alternative solutions.	32	40%
4	<b>Map Skill</b>	5	6.25%
		<b>80</b>	<b>100%</b>

**Note:**

1. Teachers may refer 'Learning Outcomes' published by NCERT for developing lesson plans, assessment framework and questions.
2. 02 Items from History Map List and 03 Items from Geography Map List

**Internal Assessment: 20 Marks**

## INTERNAL ASSESSMENT

	Marks	Description				
Periodic Assessment	10 Marks	<table border="1"> <tr> <td>Pen Paper Test</td> <td>5 marks</td> </tr> <tr> <td>Assessment using multiple strategies For example, Quiz, Debate, Role Play, Viva, Group Discussion, Visual Expression, Interactive Bulletin Boards, Gallery Walks, Exit Cards, Concept Maps, Peer Assessment, Self-Assessment, etc.</td> <td>5 marks</td> </tr> </table>	Pen Paper Test	5 marks	Assessment using multiple strategies For example, Quiz, Debate, Role Play, Viva, Group Discussion, Visual Expression, Interactive Bulletin Boards, Gallery Walks, Exit Cards, Concept Maps, Peer Assessment, Self-Assessment, etc.	5 marks
Pen Paper Test	5 marks					
Assessment using multiple strategies For example, Quiz, Debate, Role Play, Viva, Group Discussion, Visual Expression, Interactive Bulletin Boards, Gallery Walks, Exit Cards, Concept Maps, Peer Assessment, Self-Assessment, etc.	5 marks					
Portfolio	5 Marks	<ul style="list-style-type: none"> <li>• Classwork and Assignments</li> <li>• Any exemplary work done by the student</li> <li>• Reflections, Narrations, Journals, etc.</li> <li>• Achievements of the student in the subject throughout the year</li> <li>• Participation of the student in different activities like Heritage India Quiz</li> </ul>				
Subject Enrichment Activity	5 Marks	<ul style="list-style-type: none"> <li>• Project Work</li> </ul>				

### LIST OF MAP ITEMS CLASS X (2020-21)

#### A. HISTORY (Outline Political Map of India)

#### Chapter - 3 Nationalism in India – (1918 – 1930) for Locating and Labelling / Identification

##### 1. Indian National Congress Sessions:

- a. Calcutta (Sep. 1920)
- b. Nagpur (Dec. 1920)
- c. Madras (1927)

##### 2. Important Centres of Indian National Movement

- a. Champaran (Bihar) - Movement of Indigo Planters
- b. Kheda (Gujarat) - Peasant Satyagrah

- c. Ahmedabad (Gujarat) - Cotton Mill Workers Satyagraha
- d. Amritsar (Punjab) - Jallianwala Bagh Incident
- e. Chauri Chaura (U.P.) - Calling off the Non-Cooperation Movement
- f. Dandi (Gujarat) - Civil Disobedience Movement

## **B. GEOGRAPHY (Outline Political Map of India)**

### **Chapter 1: Resources and Development (Identification only)**

- a. Major soil Types

### **Chapter 3: Water Resources (Locating and Labelling)**

#### **Dams:**

- |                      |                    |
|----------------------|--------------------|
| a. Salal             | e. Sardar Sarovar  |
| b. Bhakra Nangal     | f. Hirakud         |
| c. Tehri             | g. Nagarjuna Sagar |
| d. Rana Pratap Sagar | h. Tungabhadra     |

***Note: Only map items of this chapter as listed above will be evaluated in Board Examination.***

### **Chapter 4: Agriculture (Identification only)**

- a. Major areas of Rice and Wheat
- b. Largest / Major producer states of Sugarcane, Tea, Coffee, Rubber, Cotton and Jute

### **Chapter 5: Minerals and Energy Resources**

#### **Power Plants**

#### **(Locating and Labelling only)**

##### **a. Thermal**

- |             |              |
|-------------|--------------|
| • Namrup    | • Ramagundam |
| • Singrauli |              |

##### **b. Nuclear**

- |             |             |
|-------------|-------------|
| • Narora    | • Tarapur   |
| • Kakrapara | • Kalpakkam |

***Note: Only Map Items of this chapter as listed above will be evaluated in Board Examination.***

### **Chapter 6: Manufacturing Industries (Locating and Labelling Only)**

#### **Cotton Textile Industries:**

- |           |           |
|-----------|-----------|
| a. Mumbai | b. Indore |
|-----------|-----------|

- c. Surat
- d. Kanpur

e. Coimbatore

**Iron and Steel Plants:**

- a. Durgapur
- b. Bokaro
- c. Jamshedpur

- d. Bhilai
- e. Vijaynagar
- f. Salem

**Software Technology Parks:**

- a. Noida
- b. Gandhinagar
- c. Mumbai
- d. Pune

- e. Hyderabad
- f. Bengaluru
- g. Chennai
- h. Thiruvananthapuram

**Chapter 7: Lifelines of National Economy (Locating and Labelling)**

**Major Ports:**

- a. Kandla
- b. Mumbai
- c. Marmagao
- d. New Mangalore
- e. Kochi

- f. Tuticorin
- g. Chennai
- h. Vishakhapatnam
- i. Paradip
- j. Haldia

**International Airports:**

- a. Amritsar (Raja Sansi)
- b. Delhi (Indira Gandhi International)
- c. Mumbai (Chhatrapati Shivaji)
- d. Chennai (Meenam Bakkam)

- e. Kolkata (Netaji Subhash Chandra Bose)
- f. Hyderabad (Rajiv Gandhi)

**Note: Items of Locating and Labelling may also be given for Identification.**

# Revised COMPUTER APPLICATIONS

CLASS IX (Code 165)

(2020-21)

## Learning Outcomes

1. Ability to familiarise with basics of computers.
2. Ability to navigate the file system.
3. Ability to create and edit documents, spread sheets, and presentations.
4. Ability to perform basic data manipulation using spread sheets and use Indian languages in documents.
5. Ability to send and receive emails, follow email etiquette, and communicate over the internet.
6. Ability to create and upload videos.
7. Ability to safely and correctly use websites, social networks, chat sites, and email.

## Distribution of Marks and Periods

Unit No.	Unit Name	Marks	Periods	
			Theory	Practical
1.	Basics of Information Technology	20	20	05
2.	Cyber safety	15	10	05
3.	Office Tools	15	20	60
4.	Lab Exercises	50	-	-
	Total	100	50	70

## 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
- Safely accessing websites: viruses and malware , 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 hand-outs.
- 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.	<b>Lab Test (30 marks)</b>	
	Word processing	10
	Handling spreadsheets	10
	Creating presentations	10
2.	<b>Report File + viva (10 marks)</b>	

	Report file: <ul style="list-style-type: none"> <li>• 4 documents each with a word processor, spreadsheet, and presentation tool</li> </ul>	6
	Viva voce (based on the report file)	4
3.	Project (that uses most of the concepts that have been learnt) <b>(10 marks)</b>	
	<b>Total Marks</b>	<b>50</b>

# Revised Computer Applications

CLASS X (Code 165)

(2020-21)

## Learning Outcomes

1. Ability to create a simple website
2. Ability to embed images, audio and video in an HTML page
3. Ability to use style sheets to beautify the web pages.
4. Ability to Interface a web site with a web server and record the details of a user's request.
5. Ability to follow basic cyber ethics
6. Ability to familiarize with network concepts.

## Distribution of Marks and Periods

Unit No.	Unit Name	Marks	Periods	
			Theory	Practical
1.	Networking	15	17	05
2.	HTML	25	30	50
3.	Cyber ethics	10	08	10
4.	Practicals	50	-	-
	Total	100	55	65

## Unit 1: Networking

- Internet: World Wide Web, web servers, web clients, web sites, web pages, web browsers, blogs, news groups, HTML, web address, e-mail address, downloading and uploading files from a remote site. Internet protocols: TCP/IP, SMTP, POP3, HTTP, HTTPS. Remote login and file transfer protocols: SSH, SFTP, FTP, SCP, TELNET, SMTP, TCP/IP.
- Services available on the internet: information retrieval, locating sites using search engines and finding people on the net;

- Web services: chat, email, video conferencing, e-Learning, e-Banking, eShopping, e-Reservation, e-Governance, e-Groups, social networking.
- Mobile technologies: SMS, MMS, 3G, 4G.

## Unit 2: HTML

- Introduction to web page designing using HTML: create and save an HTML document, access a web page using a web browser.
- HTML tags: html, head, title, body, (attributes: text, background, bgcolor, link, vlink, alink), *br (break)*, *hr(horizontal rule)*, *inserting comments*, *h1..h6 (heading)*, *p (paragraph)*, *b (bold)*, *i (italics)*, *u (underline)*, *ul (unordered list)*, *ol (ordered list)*, and *li (list item)*. *Description lists: dl, dt and dd. Attributes of ol (start, type), ul (type).*
- Font tags (attributes: face, size, color).
- Insert images: img (attributes: src, width, height, alt), sup (super script), sub (subscript).
- HTML Forms: Textbox, radio buttons, checkbox, password, list, combobox.
- Embed audio and video in a HTML page.
- Create a table using the tags: table, tr, th, td, rowspan, colspan
- Links: significance of linking, anchor element (attributes: href, mailto), targets.
- Cascading style sheets: colour, background-colour, border-style, margin, height, width, outline, font (family, style, size), align, float.

## Unit 3: Cyber ethics

- Netiquettes.
- Software licenses and the open source software movement.
- Intellectual property rights, plagiarism and digital property rights.
- Freedom of information and the digital divide.
- E-commerce: Privacy, fraud, secure data transmission.

## 4. Lab Exercises

- Create static web pages.

- Use style sheets to enforce a format in an HTML page (CSS).
- Embed pictures, audio and videos in an HTML page.
- Add tables and frames in an HTML page.
- Decorate web pages using graphical elements.
- Create a website using several webpages. Students may use any open source or proprietary tool.
- Work with HTML forms: text box, radio buttons, checkbox, password, list, combo box.
- Write a blog using HTML pages discussing viruses, malware, spam and antiviruses
- Create a web page discussing plagiarism. List some reported cases of plagiarism and the consequent punishment meted out. Explain the nature of the punishment in different countries as per their IP laws.

**Breakup of marks for the practicals:**

<b>S.No.</b>	<b>Unit Name</b>	<b>Marks</b>
1.	Lab Test <b>(20 marks)</b>	
	HTML (design one web page based on a diagram)	20
2.	Report File + viva <b>(20 marks)</b>	
	Report file: At least 10 HTML pages.	15
	Viva voce (based on the report file)	5
3.	Project (that uses most of the concepts that have been learnt) <b>(10 marks)</b>	
<b>Total (50 marks)</b>		