

INFORMATION TECHNOLOGY (CODE NO. 402)
CLASS IX (SESSION 2019-2020)

Information Technology (Code no. 402) Class IX (Session 2019-2020)	
Theory	50 marks
Practical	50 marks
Total Marks	100 marks

❖ **PART A: EMPLOYABILITY SKILLS**

- Unit 1- Communication Skills
- Unit 2- Self-Management Skills
- Unit 3- Basic ICT Skills
- Unit 4- Entrepreneurial Skills
- Unit 5- Green Skills

❖ **PART B:**

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

❖ **PART C: PRACTICAL WORK**

- Practical Examination
- Written Test
- Viva Voce

❖ **PART D: PROJECT WORK / FIELD VISIT**

- Practical File / Student Portfolio
- Viva Voce

INFORMATION TECHNOLOGY (CODE NO. 402)
CLASS X (SESSION 2019-2020)

Information Technology (Code no. 402) Class X (Session 2019-2020)	
Theory	50 marks
Practical	50 marks
Total Marks	100 marks

❖ **PART A: EMPLOYABILITY SKILLS**

- Unit 1- Communication Skills
- Unit 2- Self-Management Skills
- Unit 3- Basic ICT Skills
- Unit 4- Entrepreneurial Skills
- Unit 5- Green Skills

❖ **PART B:**

- Unit 1- Web Applications (Basics)
- Unit 2- Word Processing (Intermediate)
- Unit 3- Spreadsheet (Intermediate)
- Unit 4- Digital Presentation (Intermediate)
- Unit 5- E-Mail Messaging (Intermediate)
- Unit 6- Data Base Development (Basics)

❖ **PART C: PRACTICAL WORK**

- Practical Examination
- Written Test
- Viva Voce

❖ **PART D: PROJECT WORK / FIELD VISIT**

- Practical File / Student Portfolio
- Viva Voce

ENGLISH LANGUAGE AND LITERATURE

(Code No. 184) (2019-20)

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.

Objectives

The general objectives at this stage are 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 registers 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
- build listening and speaking into the curriculum.

At the end of this stage, learners will be able to do the following:

- 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 the story 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 position 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 view 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

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)

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, contrive 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-to-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 (2019-20)
SECTION - WISE WEIGHTAGE

Section		Total Weightage 80
A	Reading Skills	20
B	Writing Skills with Grammar	30
C	Literature Textbook and Supplementary Reading Text	30

Note-The annual board examination will be of 80 marks, with a duration of three hours. There will be internal assessment for 20 Marks.

SECTION A: READING

50 Periods

This section will have two reading passages.

20 Marks

1: A Factual passage 300-350 words with eight Objective Type Questions(including Multiple Choice Questions). 8 marks

2 A Discursive passages of 350-400 words with four Short Answer Type Questions to test inference, evaluation and analysis four Objective Type Questions (including Multiple Choice Questions) to test vocabulary.

12 marks

SECTION B: WRITING AND GRAMMAR

60 Periods

For writing tasks there will be internal choice.30 Marks

3: Writing an Article/Descriptive Paragraph (person/place/event/diary entry) in about 100-150 words based on visual or verbal cue/s. The questions will be thematically based on the prescribed books. 8 marks

4: Writing a short story based on a given outline or cue/s in about 150-200 words. 10 marks

The Grammar syllabus will include the following areas

- i. Tenses
- ii. Modals
- iii. Use of passive voice
- iv. Subject – verb concord
- v. Reporting
- vi. Commands and requests
- vii. Statements
- viii. Questions
- ix. Clauses:
 - a. Noun clauses
 - b. Adverb clauses of condition and time
 - c. Relative clauses
- x. Determiners
- xi. Prepositions

The above items may be tested through test types(grammar in context) as given below:

5: Gap filling with one or two words to test Prepositions, Articles, Conjunctions and Tenses. 4 marks

6: Editing or omission 4 marks

7: Sentences reordering or sentence transformation in context. 4 marks

SECTION C: LITERATURE TEXTBOOKS

60 Periods

There will be Internal Choice for every question.

30 Marks

8. One out of two extracts from prose/poetry/play for reference to the context. Four Objective Type Questions: two questions of one mark each on global comprehension and two questions of one mark each on interpretation. (1x4=4 marks)

9 Five Short Answer Type Questions from BEEHIVE AND MOMENTS (3 questions out of four from BEEHIVE and 2 questions out of three from MOMENTS) to test local and global comprehension of theme and ideas (to be answered in 30-40 words each) (2x5=10 marks)

10. One out two long answer type questions from the book BEEHIVE to assess creativity, imagination and extrapolation beyond the text and across the texts. ((to be answered in 100-150 words each)

8 marks

11 One out of two Long Answer Questions from the book MOMENTS on theme or plot involving interpretation, extrapolation beyond the text and inference or character sketch in about (100-150 words).

8 marks

Prescribed Books: Published by NCERT, New Delhi

- BEEHIVE – Textbook for class IX
- MOMENTS – Supplementary Reader for Class IX
- Words and Expressions-I, Workbook

NOTE: Teachers are advised to:

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

Besides measuring attainment, texts serve the dual purpose of diagnosing mistakes and areas of non-learning. To make evaluation a true index of learners' attainment, 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 skills 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

Assessment of Listening and Speaking Skills 50 Periods

Assessment of Listening and Speaking Skills will be for 20 marks. It is recommended that listening and speaking skills should be regularly practiced in the class. Art-integrated activities like Role Play, Skit, Dramatization etc. can also be used.

ENGLISH LANGUAGE AND LITERATURE (Code No. 184)

Textbooks

Literature Reader- Course (2019-20) CLASS – IX

PROSE (Beehive)	
1. The Fun They Had	7. Packing
2. The Sound of Music	8. Reach for the Top
3. The Little Girl	9. The Bond of Love
4. A Truly Beautiful Mind	10. Kathmandu
5. The Snake and the Mirror	11. If I were you
6. My Childhood	
POETRY	
1. The Road Not Taken	6. No Men Are Foreign
2. Wind	7. The Duck and the Kangaroo
3. Rain on the Roof	8. On Killing a Tree
4. The Lake Isle of Innisfree	9. The Snake Trying
5. A Legend of the Northland	10. A Slumber did My Spirit Seal
SUPPLEMENTARY READER (Moments)	
1. The Lost Child	6. Weathering the Storm in Ersama
2. The Adventures of Toto	7. The Last leaf

3. Iswaran the Storyteller	8. A House is Not a Home
4. In the Kingdom of Fools	9. The Accidental Tourist
5. The Happy Prince	10. The Beggar

ENGLISH LANGUAGE AND LITERATURE

(Code No. 184) CLASS – IX (2019 – 20)

Marks=80

Typology	Testing Competencies	Objective Type Question including MCQs(1 mark each	Short Answer Question 30-40 words (2 marks each)	Long Answer Question 1 100-150 words (HOTS)(8 marks each)	Very Long Answer Question 150-200 words (HOTS) (10 marks each)	Total marks
Reading Comprehension	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	4 MCQ & 8 Objective Type Questions	4	-	-	20
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	12	-	1	1	30
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.	4	5	2	-	30
Total		1x28=28	2x9=18	8x3=24	10x1=10	80

ENGLISH LANGUAGE AND LITERATURE (Code No. 184)

CLASS – X 2019-20

SECTION - WISE WEIGHTAGE IN ENGLISH LANGUAGE AND LITERATURE

Section		Total Weightage 80
A	Reading Skills	20
B	Writing Skills with Grammar	30
C	Literature Textbooks and Supplementary Reading Text	30
	TOTAL	80

Note: The annual board examination will be of 80 marks, with a duration of three hours. There will be internal assessment for 20 Marks.

SECTION A: READING

50 Periods

20 Marks

This section will have two unseen passages of a total length of 700-750. The arrangement within the reading section is as follows:

I. A factual passage of 300-350 words with eight Objective Type Question(including Multiple Choice Questions).8 marks

II.A Discursive passages of 350-400 words with four Short Answer Type Questions to test inference, evaluation and analysis four Objective Type Question(including Multiple Choice Questions) to test vocabulary. 12 marks

SECTION B: WRITING AND GRAMMAR 60 Periods

For writing tasks there will be internal choice

30 Marks

III. Formal letter complaint / inquiry / placing order / letter to editor / article in about 100-150 words. The questions will be thematically based on the prescribed books.8 marks

IV. Writing a short story based on a given outline or cue/s in about 150-200 words. 10 marks

The Grammar syllabus will include the following areas in class X.

1. Tenses
2. Modals
3. Use of passive voice

4. Subject – verb concord

5. Reporting

(i) Commands and requests

(ii) Statements

(iii) Questions

6. Clauses:

(i) Noun clauses

(ii) Adverb clauses

(iii) Relative clauses

7. Determiners

8. Prepositions

The above items may be tested through test types given below:

V Gap filling with one or two words to test Prepositions, Articles, Conjunctions and Tenses. 4 marks

VI Editing or omission. 4 marks

VII Sentences Reordering or Sentence Transformation in context. 4 marks

SECTION C

LITERATURE TEXTBOOKS AND SUPPLEMENTARY READING TEXT 60 Periods

Internal choice will be there.

30 Marks

VIII. One out of two extracts from prose/poetry/drama for reference to context. Four Objective Type Question(including MCQs): Two questions of one mark each on global comprehension and two questions of 1 mark each on interpretation. 4 marks

IX. Five Short Answer type Questions to be answered in 30-40 words each from FIRST FLIGHT and FOOTPRINTS WITHOUT FEET to test local and global comprehension of theme and ideas(three from FIRST FLIGHT and two from FOOTPRINTS WITHOUT FEET) . 2x5=10 marks

X. One out of two Long Answer type Questions from FIRST FLIGHT to be answered in about 100-150 words to assess creativity, imagination and extrapolation beyond the text and across the texts.

8 marks

XI. One out of two long answer question from the book 'FOOTPRINTS without FEET' on theme or plot involving interpretation, extrapolation beyond the text and inference or character sketch to be answered in about 100-150 words. 8 marks

Prescribed Books: Published by NCERT, New Delhi

- FIRST FLIGHT – Text for Class X
- FOOTPRINTS WITHOUT FEET – Supplementary Reader for Class X

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-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) continue the Speaking and Listening activities given in the NCERT books.

Besides measuring attainment, texts serve the dual purpose of diagnosing mistakes and areas of non-learning. To make evaluation a true index of learners' attainment, 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 skills 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. There will be no division of syllabus for Grammar.

INTERNAL ASSESSMENT

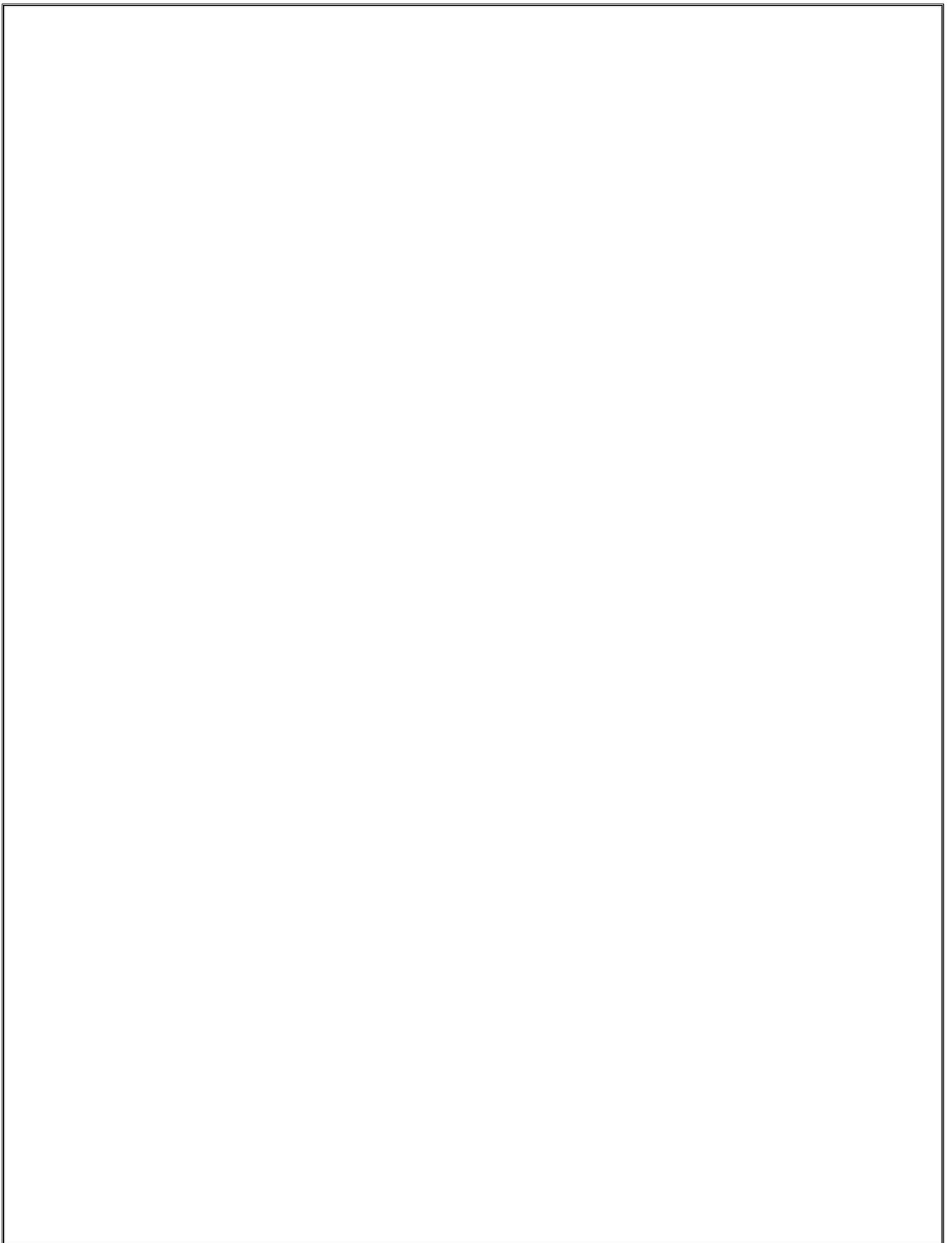
Assessment of Listening and Speaking Skills 50 Periods

Assessment of Listening and Speaking Skills will be for 20 marks. It is recommended that listening and speaking skills should be regularly practiced in the class. Art-integrated activities like role-play, skit, dramatization etc. can also be used.

ENGLISH LANGUAGE AND LITERATURE (Code No. 184)
Course (2018-19) CLASS - X

Textbooks	
Literature Reader (First Flight)	
PROSE (First Flight)	
1.A Letter to God 2.Nelson Mandela 3.Two Stories about Flying 4.From the Diary of Anne Frank 5.The Hundred Dresses –I 6.The Hundred Dresses –II	7.Glimpses of India 8.Mijbil the Otter 9.Madam Rides the Bus 10. The Sermon at Benares 11. The Proposal
POETRY	
1.Dust of Snow 2.Fire and Ice 3.A Tiger in the Zoo 4.How to Tell Wild Animals 5.The Ball Poem 6. Amanda	7. Animals 8.The Trees 9.Fog 10. The Tale of Custard the Dragon 11. For Anne Gregory
SUPPLEMENTARY READER (Footprints without Feet)	

1.A Triumph of Surgery	6.The Making of a Scientist
2.The Thief's Story	7.The Necklace
3.The Midnight Visitor	8.The Hack Driver
4.A Question of Trust	9.Bholi
5.Footprints without Feet	10. The Book that Saved the Earth



ENGLISH LANGUAGE AND LITERATURE
CLASS - X (2019-20)(Code no.184)

Marks 80

Typology	Testing competencies	Objective Type Question including MCQs (1 mark each)	Short Answer Question 30-40 words (2 marks each)	Long Answer Question 100-150 words (8 marks each)	Very Long Answer Question 150-200 words (10 marks each)	Total marks
Reading Comprehension	Conceptual Understanding, decoding Analyzing, inferring, interpreting and vocabulary	4 MCQ+ 8 Objective Type Questions	4	-	-	20
Writing Skill and Grammar	Creative expression of an opinion, reasoning, justify, illustrating, appropriacy of style and tone, using appropriate format and fluency, applying conventions, using integrated structures with accuracy and fluency.	12	-	1	1	30
Literature Textbook and Supplementary Reading Text	Recalling, reasoning, appreciating, applying literary conventions extrapolating, illustrating and justifying etc. Extracting relevant information, identifying the central theme and subthemes, understanding the writer's message and writing fluently.	4	5	2	-	30
Total		1x28=28	2x9=18	8x3=24	10x1=10	80

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

कक्षा 9वीं - 10वीं

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 छठी 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 करना।
- हिंदी के किशोर-साहित्य, अखबार व पत्रिकाओं को पढ़कर समझ पाना और उसका आनंद उठाने की क्षमता का विकास करना।
- औपचारिक विषयों और संदर्भों में बातचीत में भाग ले पाने की क्षमता का विकास करना।
- हिंदी के जरिए अपने अनुभव संसार को लिखकर 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 करना।
- 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।

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 धीरज 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।

व्याकरण बिंदु

कक्षा 9वीं

- वर्ण-विच्छेद, अनुस्वार, अनुनासिक, नुक्ता।
- तरह-तरह के पाठों के संदर्भ में शब्दों के अवलोकन द्वारा उपसर्ग, संधि एवं प्रत्यय।
- वाक्य के स्तर पर विराम चिह्नों का समुचित प्रयोग।

कक्षा 10वीं

- शब्द, पद और पदबंध में अंतर।
- रचना के आधार पर वाक्य रूपांतर।
- शब्दों के अवलोकन द्वारा सामासिक शब्दों की पहचान और उनके अर्थ का अनुमान।
- मुहावरों और उनका प्रयोग।
- वाक्य अशुद्धि शोधन।

श्रवण (सुनने) और वाचन (बोलने) की योग्यताएँ

- प्रवाह के साथ बोली जाती हुई हिंदी को अर्थबोध के साथ समझना। वार्ताओं या संवादों को 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।

श्रवण (सुनना) - 2.5 अंक (ढाई अंक) व वाचन (बोलना) -2.5 अंक (ढाई अंक) का परीक्षण : कुल 5 अंक (पाँच अंक)

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

या

परीक्षक 1 - 1½ 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 परीक्षा/ऑडियो क्लिप को सुनने के पश्चात परीक्षक द्वारा पूछे गए प्रश्नों का अपनी समझ से मौखिक उत्तर देंगे।

कौशलों के आधार

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

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 एमटी 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 बर्तनी लिखना।
- विराम चिह्नों का समुचित प्रयोग 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 एक अभीष्ट विषय पर अनुच्छेद लिखनी।
- 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
- सामसिकता - सीमित शब्दों में यथासंभव पूरी बात कहने का प्रयास, अनावश्यक बातें न करके केवल विषय संबद्ध वर्णन-विवेचन

विज्ञापन लेखन

विज्ञापित वस्तु / विषय को केंद्र में रखते हुए

- विज्ञापित वस्तु के विशिष्ट गुणों का उल्लेख
- आकर्षक लेखन शैली
- पुस्तुति में नयापन, वर्तमान से जुड़ाव तथा दूसरों 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। बातचित विषय, काल्पनिक या किसी वार्ता को सुनकर यथार्थ प्र 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

चित्र-वर्णन

चित्र को देखकर कल्पनाशक्ति जागृत, चित्र में दिखाई दे रहे दृश्य/ घटना को अपने शब्दों में उतरना जिसमें

- परिवेश की समझ
- सूक्ष्म विवरणों पर ध्यान
- दृश्यानुकूल भाषा
- क्रमबद्धता और आंतरिक सांगित
- कम शब्दों में प्रभावशाली अभिव्यक्ति

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 भाषाशैली, उपयुक्त, सटीक शब्दों के प्रयोग, सीधे-सादे ढंग से स्पष्ट और प्रत्यक्ष बात की प्रस्तुति जिसमें
- प्रारूप की आवश्यक औपचारिकताओं के साथ सुस्पष्ट, सुलझे और क्रमबद्ध विचार
- आवश्यक तथ्य, संक्षेप और सम्पूर्णता के साथ प्रभावान्विति

कक्षा 9वीं हिंदी 'ब'- परीक्षाओं हेतु पाठ्यक्रम विनिर्देशन 2019-20

परीक्षा भार विभाजन			
	विषयवस्तु	उप भार	कुल भार
1	अपठित गद्यांश व काव्यांश पर शीर्षक का चुनाव, विषय-वस्तु का बोध, अभिव्यक्ति आदि पर अति लघु प्रश्न एवं लघु प्रश्न		15
	i अपठित गद्यांश (100 से 150 शब्दों के) (2x4) (1x1)	9	
	ii अपठित काव्यांश लघु प्रश्न (विकल्प सहित) (2x3)	6	
2	व्याकरण के लिए निर्धारित विषयों पर विषय-वस्तु का बोध, भाषिक बिंदु		15

	/संरचना आदि परप्रश्न पूछे जाएंगे। (1x15) (व्याकरण सिर्फ पाठ्यपुस्तक से)		
	i	वर्ण विच्छेद (विकल्प सहित) (2 अंक)	02
	ii	अनुस्वार (1 अंक), अनुनासिक (1 अंक) (सभी विकल्प सहित)	02
	iii	नुक्ता (1अंक) (विकल्प सहित)	01
	iv	उपसर्ग-प्रत्यय (3 अंक) (विकल्प सहित)	03
	v	संधि (4 अंक) (विकल्प सहित)	04
	vi	विराम चिह्न (3 अंक) (विकल्प सहित)	03
3	पाठ्यपुस्तक स्पर्श भाग - 1 व पूरकपाठ्यपुस्तक संचयन भाग 1		
	अ	गद्य खंड	10
	i	पाठ्यपुस्तक स्पर्श के गद्य पाठों के आधार पर लघु प्रश्न । (2x2) (1x1)	05
	ii	पाठ्य पुस्तक स्पर्श के निर्धारित पाठों(गद्य) पर एक निबंधात्मक प्रश्न (5x1) (विकल्प सहित)	05
	ब	काव्य खंड	10
	i	पाठ्यपुस्तक स्पर्श के काव्य खंड के आधार पर लघु प्रश्न (2x2), (1x1)	05
	ii	कविता की समझ पर आधारित एक निबंधात्मक प्रश्न (5x1) (विकल्प सहित)	05
	स	पूरक पाठ्यपुस्तक संचयन भाग - 1	05
		'संचयन' के निर्धारित पाठों से दो प्रश्न जिसमें से एक प्रश्न जिसमें से एक प्रश्न (विकल्प सहित) 3 अंक का होगा (3x1) और दूसरा प्रश्न 2 अंक का होगा। (2x1)	05
			25
4	लेखन		
	अ	संकेत बिंदुओं पर आधारित समसामयिक/व्यावहारिक जीवन से जुड़े हुए विषयों में से किसी एक विषय पर 80 से 100 शब्दों में अनुच्छेद (5x1) (विकल्प सहित)	05
	ब	अनौपचारिक विषय से संबंधित पत्र। (5x1) (विकल्प सहित)	05
	स	चित्र वर्णन (20-30 शब्दों) (5x1) (विकल्प सहित)	05
	द	किसी एक स्थिति पर 50 शब्दों के अंतर्गत संवाद लेखन (5x1) (विकल्प सहित)	05
	इ	विषय से संबंधित 25-50 शब्दों के अंतर्गत विज्ञापन लेखन (5x1) (विकल्प सहित)	05
			25
		कुल	80

नोट : निम्नलिखित पाठ केवल पठन के लिए

स्पर्श (भाग - 1)	<ul style="list-style-type: none"> * धूल * वैज्ञानिक चेतना के वाहक चंद्रशेखर वेंकट रामन * गीत - अगीत
संचयन (भाग - 1)	<ul style="list-style-type: none"> * कल्लू कुम्हार की उनाकोटी * मेरा छोटा-सा निजी पुस्तकालय

कक्षा 10वीं हिंदी 'ब' परीक्षा हेतु पाठ्यक्रम विनिर्देशन 2019-2020

परीक्षा भार विभाजन			
	विषयवस्तु	उप भार	कुल भार
1	अपठित गद्यांश व काव्यांश पर शीर्षक का चुनाव, विषय-वस्तु का बोध, अभिव्यक्ति आदि पर अति लघु प्रश्न एवं लघु प्रश्न		15
	अ अपठित गद्यांश (100 से 150 शब्दों के) (2x4) (1x1)	9	
	ब अपठित काव्यांश लघु प्रश्न (विकल्प सहित) (2x3)	6	
2	व्याकरण के लिए निर्धारित विषयों पर विषय-वस्तु का बोध, भाषिक बिंदु /संरचना आदि पर प्रश्न (1x15)		15
	1 शब्द और पद (1 अंक)	01	
	2 रचना के आधार पर वाक्य रूपांतर (3 अंक)	03	
	3 समास (4 अंक)	04	
	4 अशुद्धि शोधन (4 अंक)	04	
	5 मुहावरे (3 अंक)	03	
3	पाठ्यपुस्तक स्पर्श भाग - 2 व पूरक पाठ्यपुस्तक संचयन भाग 2		25
	अ गद्य खंड	10	
	1 पाठ्यपुस्तक स्पर्श के गद्य पाठों के आधार पर लघु प्रश्न (2x2) (1x1)	05	
	2 पाठ्य पुस्तक स्पर्श के निर्धारित पाठों (गद्य) पर एक निबंधात्मक प्रश्न (5 x1) (विकल्प सहित)	05	
	ब काव्य खंड	10	
	1 पाठ्यपुस्तक स्पर्श के काव्य खंड के आधार पर लघु प्रश्न (2x2) (1x 1)	05	
	2 कविता की समझ पर आधारित एक निबंधात्मक प्रश्न (5 x1) (विकल्प सहित)	05	
	स पूरक पाठ्यपुस्तक संचयन भाग - 2	05	
	पूरक पाठ्यपुस्तक संचयन के निर्धारित पाठों से दो प्रश्न प्रश्न पूछे जाएंगे जिसमें से एक प्रश्न 3 अंक (विकल्प सहित) (3x1) व दूसरा	05	

		2 अंक (2x1) का होगा।		
4	लेखन			25
	अ	संकेत बिंदुओं पर आधारित समसामयिक एवं व्यावहारिक जीवन से जुड़े हुए किन्ही तीन विषयों में से किसी एक विषय पर 80 से 100 शब्दों में अनुच्छेद (5x1)	5	
	ब	औपचारिक विषय से संबंधित पत्रा(5x1) (विकल्प सहित)	5	
	स	एक विषय 20-30 शब्दों में सूचना लेखन (5x1) (विकल्प सहित)	5	
	द	किसी एक स्थिति पर 50 शब्दों के अंतर्गत संवाद लेखन(5x1) (विकल्प सहित)	5	
	इ	विषय से संबंधित 25-50 शब्दों के अंतर्गत विज्ञापन लेखन(5x1)	5	
		कुल		80

नोट : निम्नलिखित पाठ केवल पठन के लिए।

पूर्व की टिप्पणी को ध्यान में रेखा जाए।

स्पर्श (भाग - 2)	<ul style="list-style-type: none"> • मधुर मधुर मेरे दीपक जल • तीसरी कसम के शिल्पकार शैलेंद्र • गिरगिट
------------------	--

MATHEMATICS (IX-X)

Session 2019-20

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	80

UNIT I: NUMBER SYSTEMS

1. REAL NUMBERS

(16 Periods)

- Review of representation of natural numbers, integers, rational numbers on the number line. Representation of terminating / non-terminating recurring decimals on the number line through successive magnification. Rational numbers as recurring/ terminating decimals. Operations on real numbers.
- Examples of non-recurring/non-terminating decimals. Existence of non-rational numbers (irrational numbers) such as $\sqrt{2}$, $\sqrt{3}$ and their representation on the number line. Explaining that every real number is represented by a unique point on the number line and conversely, viz. every point on the number line represents a unique real number.
- Definition of nth root of a real number.
- Rationalization (with precise meaning) of real numbers of the type $\frac{1}{a+b\sqrt{x}}$ and $\frac{1}{\sqrt{x}+\sqrt{y}}$ (and their combinations) where x and y are natural 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

(23) Periods

Definition of a polynomial in one variable, with examples and counter examples. Coefficients of a polynomial, terms of a polynomial and zero polynomial. Degree of a polynomial. Constant, linear, quadratic and cubic polynomials. Monomials, binomials, trinomials. Factors and multiples. Zeros of a polynomial. Motivate and State the Remainder Theorem with examples. Statement and proof of the Factor Theorem. Factorization of $ax^2 + bx + c$, $a \neq 0$ 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:

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

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

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

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

and their use in factorization of polynomials.

2. LINEAR EQUATIONS IN TWO VARIABLES

(14) 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, including problems on Ratio and Proportion and 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. INTRODUCTION TO EUCLID'S GEOMETRY (Not for assessment)

(6) Periods

History - Geometry in India and Euclid's geometry. Euclid's method of formalizing observed phenomenon into rigorous Mathematics with definitions, common/obvious notions, axioms/postulates and theorems. The five postulates of Euclid. Equivalent versions of the fifth postulate. Showing the relationship between axiom and theorem, for example:

(Axiom) 1. Given two distinct points, there exists one and only one line through them.

(Theorem) 2. (Prove) Two distinct lines cannot have more than one point in common.

2. LINES AND ANGLES

(13) Periods

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

3. TRIANGLES

(20) Periods

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

3. (Motivate) Two triangles are congruent if the three sides of one triangle are equal to three sides of the other triangle (SSS Congruence).
4. (Motivate) Two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle. (RHS Congruence)
5. (Prove) The angles opposite to equal sides of a triangle are equal.
6. (Motivate) The sides opposite to equal angles of a triangle are equal.
7. (Motivate) Triangle inequalities and relation between 'angle and facing side' inequalities in triangles.

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. AREA

(7) Periods

Review concept of area, recall area of a rectangle.

1. (Prove) Parallelograms on the same base and between the same parallels have equal area.
2. (Motivate) Triangles on the same base (or equal bases) and between the same parallels are equal in area.

6. CIRCLES

(15) 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) There is one and only one circle passing through three given non-collinear points.
4. (Motivate) Equal chords of a circle (or of congruent circles) are equidistant from the center (or their respective centers) and conversely.
5. (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.
6. (Motivate) Angles in the same segment of a circle are equal.
7. (Motivate) If a line segment joining two points subtends equal angle at two other points lying on the same side of the line containing the segment, the four points lie on a circle.
8. (Motivate) The sum of either of the pair of the opposite angles of a cyclic quadrilateral is 180° and its converse.

7. CONSTRUCTIONS

(10) Periods

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

UNIT V: MENSURATION

1. AREAS

(4) Periods

Area of a triangle using Heron's formula (without proof) and its application in finding the area of a quadrilateral.

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

(13) Periods

Introduction to Statistics: Collection of data, presentation of data – tabular form, ungrouped / grouped, bar graphs, histograms (with varying base lengths), frequency polygons. Mean, median and mode of ungrouped data.

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
Code (041)
QUESTION PAPER DESIGN
CLASS – IX (2019-20)

Time: 3 Hrs.

Max. Marks: 80

S. No.	Typology of Questions	Very Short Answer-Objective type (VSA) (1 Mark)	Short Answer-I (SA) (2 Marks)	Short Answer-II (SA) (3 Marks)	Long Answer (LA) (4 Marks)	Total Marks	% Weightage (approx.)
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	6	2	2	1	20	25
2	Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	6	1	1	3	23	29
3	Applying: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	5	2	2	1	19	24
4	Analysing : Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations Evaluating: Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. Creating: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions	3	1	3	1	18	22
	Total	20x1 =20	6x2 =12	8x3=24	6x4=24	80	100

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

COURSE STRUCTURE CLASS -X

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	80

UNIT I: NUMBER SYSTEMS

1. REAL NUMBER

(15) Periods

Euclid's division lemma, 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

(7) Periods

Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials. Statement and simple problems on division algorithm for polynomials with real coefficients.

2. PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

(15) 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 and by cross multiplication method. Simple situational problems. Simple problems on equations reducible to linear equations.

3. QUADRATIC EQUATIONS

(15) 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.

Situational problems based on quadratic equations related to day to day activities to be incorporated.

4. ARITHMETIC PROGRESSIONS

(8) Periods

Motivation for studying Arithmetic Progression Derivation of the n^{th} term and sum of the first n terms of A.P. and their application in solving daily life problems.

UNIT III: COORDINATE GEOMETRY

1. LINES (In two-dimensions)

(14) Periods

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

UNIT IV: GEOMETRY

1. TRIANGLES

(15) 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) The ratio of the areas of two similar triangles is equal to the ratio of the squares of their corresponding sides.
8. (Prove) In a right triangle, the square on the hypotenuse is equal to the sum of the squares on the other two sides.
9. (Prove) In a triangle, if the square on one side is equal to sum of the squares on the other two sides, the angles opposite to the first side is a right angle.

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

(8) Periods

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

UNIT V: TRIGONOMETRY

1. INTRODUCTION TO TRIGONOMETRY

(10) Periods

Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined); motivate the ratios whichever are defined at 0° and 90° . Values of the trigonometric ratios of 30° , 45° and 60° . Relationships between the ratios.

2. TRIGONOMETRIC IDENTITIES

(15) Periods

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

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° , 45° , 60° .

UNIT VI: MENSURATION

1. AREAS RELATED TO CIRCLES

(12) 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° , 90° and 120° only. Plane figures involving triangles, simple quadrilaterals and circle should be taken.)

2. SURFACE AREAS AND VOLUMES

(12) Periods

1. Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones. Frustum of a cone.
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

(18) Periods

Mean, median and mode of grouped data (bimodal situation to be avoided). Cumulative frequency graph.

2. PROBABILITY

(10) Periods

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

MATHEMATICS-Standard
Code (041)
QUESTION PAPER DESIGN
CLASS – X (2019-20)

Time : 3 Hours

Max. Marks: 80

S. No.	Typology of Questions	Very Short Answer-Objective type (VSA) (1 Mark)	Short Answer-I (SA) (2 Marks)	Short Answer-II (SA) (3 Marks)	Long Answer (LA) (4 Marks)	Total Marks	% Weightage (approx.)
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	6	2	2	1	20	25
2	Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	6	1	1	3	23	29
3	Applying: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	5	2	2	1	19	24
4	Analyzing : Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations Evaluating: Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. Creating: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions	3	1	3	1	18	22
	Total	20x1 =20	6x2 =12	8x3=24	6x4=24	80	100

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

MATHEMATICS-Basic
Code (241)
QUESTION PAPER DESIGN
CLASS – X (2019-20)

Time : 3Hours

Max. Marks: 80

S. No.	Typology of Questions	Very Short Answer-Objective type (VSA) (1 Mark)	Short Answer-I (SA) (2 Marks)	Short Answer-II (SA) (3 Marks)	Long Answer (LA) (4 Marks)	Total Marks	% Weightage (approx.)
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	5	2	5	2	32	40
2	Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	7	1	1	4	28	35
3	Applying: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	5	2	1	-	12	15
4	Analyzing : Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations Evaluating: Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. Creating: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions	3	1	1	-	8	10
	Total	20x1 =20	6x2 =12	8x3=24	6x4=24	80	100

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

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
<http://www.ncert.nic.in/exemplar/labmanuals.html>
6. Mathematics exemplar problems for class IX, NCERT publication.
7. Mathematics exemplar problems for class X, NCERT publication.

SCIENCE

(Code No. 086)

Class: IX and X (2019-20)

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 entire syllabus.
2. The annual examination will be of 80 marks and 20 marks shall be for Internal Assessment.
3. The components of Internal Assessment would be:
 - a. Periodic Assessment of 10 marks that would include:
 - For 5 marks- Three periodic tests conducted by the school. Average of the best two tests to be taken. This 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 map, etc. This will also have a weightage of 05 marks towards the final result.

- b. 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, other sample of student work, self-assessment and peer-assessment. This will carry a weightage of 5 marks towards the final results.

COURSE STRUCTURE
CLASS IX
(Annual Examination)

Marks: 80

Unit No.	Unit	Marks	Periods
I	Matter - Its Nature and Behaviour	23	50
II	Organization in the Living World	20	45
III	Motion, Force and Work	27	60
IV	Our Environment	06	15
V	Food; Food Production	04	10
	Total	80	
	Internal assessment	20	
	Grand Total	100	

Theme: Materials

(50 Periods)

Unit I: Matter-Nature and Behaviour

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

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

Particle nature, 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

(45 Periods)

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).

Biological Diversity: Diversity of plants and animals-basic issues in scientific naming, basis of classification. Hierarchy of categories / groups, Major groups of plants (salient features) (Bacteria, Thallophyta, Bryophyta, Pteridophyta, Gymnosperms and Angiosperms). Major groups of animals (salient features) (Non-chordates upto phyla and chordates upto classes).

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

(60 Periods)

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.

Floatation: Thrust and Pressure. Archimedes' Principle; Buoyancy; Elementary idea of Relative Density.

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

Sound: Nature of sound and its propagation in various media, speed of sound, range of hearing in humans; ultrasound; reflection of sound; echo and SONAR. Structure of the Human Ear (Auditory aspect only).

Theme: Natural Resources: Balance in nature

(15 Periods)

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.

Theme: Food

(10 Periods)

Unit V: Food Production

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

PRACTICALS

(30 Periods)

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

(LIST OF EXPERIMENTS)

1. Preparation of:
 - 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
 - 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. Separation of the components of a mixture of sand, common salt and ammonium

chloride (or camphor).

4. Perform the following reactions and classify them as physical or chemical changes:
 - 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
5. Preparation of stained temporary mounts of (a) onion peel, (b) human cheek cells & to record observations and draw their labeled diagrams.
6. 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.
7. Determination of the melting point of ice and the boiling point of water.
8. Verification of the Laws of reflection of sound.
9. Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder.
10. Establishing the relation between the loss in weight of a solid when fully immersed in
 - a) Tap water
 - b) Strongly salty water with the weight of water displaced by it by taking at least two different solids.
11. Determination of the speed of a pulse propagated through a stretched string/slinky(helical spring).
12. Study of the characteristics of *Spirogyra*, *Agaricus*, Moss, Fern, Pinus (either with male or female cone) and an Angiospermic plant. Draw and give two identifying features of the groups they belong to.
13. Observe the given pictures/charts/models of earthworm, cockroach, bony fish and bird. For each organism, draw their picture and record:
 - a) one specific feature of its phylum.
 - b) one adaptive feature with reference to its habitat.
14. Verification of the law of conservation of mass in a chemical reaction.
15. Study of the external features of root, stem, leaf and flower of monocot and dicot plants.

COURSE STRUCTURE: CLASS X
(Annual Examination)

Marks: 80

Unit No.	Unit	Marks	Periods
I	Chemical Substances-Nature and Behaviour	25	55
II	World of Living	23	50
III	Natural Phenomena	12	23
IV	Effects of Current	13	32
V	Natural Resources	07	20
	Total	80	
	Internal assessment	20	
	Grand Total	100	

Theme : Materials

(55 Periods)

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; Basic metallurgical processes; Corrosion and its prevention.

Carbon compounds: Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series. Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes, alkanes and alkynes), difference

between saturated hydrocarbons and unsaturated hydrocarbons. Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction). Ethanol and Ethanoic acid (only properties and uses), soaps and detergents.

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

(50 Periods)

Unit II: World of Living

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

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

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

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

Theme : Natural Phenomena

(23 Periods)

Unit III: Natural Phenomena

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

Refraction; Laws of refraction, refractive index.

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

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

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

Theme: How Things Work**(32 Periods)****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, Electric Generator, Direct current. Alternating current: frequency of AC. Advantage of AC over DC. Domestic electric circuits.

Theme: Natural Resources**(20 Periods)****Unit V: Natural Resources**

Sources of energy: Different forms of energy, conventional and non-conventional sources of energy: Fossil fuels, solar energy; biogas; wind, water and tidal energy; Nuclear energy. Renewable versus non-renewable sources of Energy.

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

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

1. A. Finding the pH of the following samples by using pH paper/universal indicator:
 - (i) Dilute Hydrochloric Acid
 - (ii) Dilute NaOH solution
 - (iii) Dilute Ethanoic Acid solution
 - (iv) Lemon juice
 - (v) Water
 - (vi) Dilute Hydrogen Carbonate solution
- B. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:
 - a) Litmus solution (Blue/Red)
 - b) Zinc metal
 - c) Solid sodium carbonate
2. Performing and observing the following reactions and classifying them into:
 - A. Combination reaction
 - B. Decomposition reaction
 - C. Displacement reaction
 - D. Double displacement reaction
 - (i) Action of water on quicklime
 - (ii) Action of heat on ferrous sulphate crystals
 - (iii) Iron nails kept in copper sulphate solution
 - (iv) Reaction between sodium sulphate and barium chloride solutions
3. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:
 - i) $\text{ZnSO}_4(\text{aq})$
 - ii) $\text{FeSO}_4(\text{aq})$
 - iii) $\text{CuSO}_4(\text{aq})$
 - iv) $\text{Al}_2(\text{SO}_4)_3(\text{aq})$

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

4. Studying the dependence of potential difference (V) across a resistor on the current (I)

- passing through it and determine its resistance. Also plotting a graph between V and I .
5. Determination of the equivalent resistance of two resistors when connected in series and parallel.
 6. Preparing a temporary mount of a leaf peel to show stomata.
 7. Experimentally show that carbon dioxide is given out during respiration.
 8. Study of the following properties of acetic acid (ethanoic acid):
 - i) odour
 - ii) solubility in water
 - iii) effect on litmus
 - iv) reaction with Sodium Hydrogen Carbonate
 9. Study of the comparative cleaning capacity of a sample of soap in soft and hard water.
 10. Determination of the focal length of:
 - i) Concave mirror
 - ii) Convex lensby obtaining the image of a distant object.
 11. Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.
 12. Studying (a) binary fission in *Amoeba*, and (b) budding in yeast and Hydra with the help of prepared slides.
 13. Tracing the path of the rays of light through a glass prism.
 14. Finding the image distance for varying object distances in case of a convex lens and drawing corresponding ray diagrams to show the nature of image formed.
 15. Identification of the different parts of an embryo of a dicot seed (Pea, gram or red kidney bean).

PRESCRIBED BOOKS:

- Science-Textbook for class IX-NCERT Publication
- Science-Text book for class X- NCERT 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

QUESTION PAPER DESIGN
Class: IX AND X (2019-20)
Subject: Science (086)

1) Board Examination –Theory

Maximum Marks: 80

Duration : 3 Hours

Sr. No.	Typology of Questions	Objective Type * (01 mark)	SA (03 marks)	LA (05 marks)	Total
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	07	02	01	22.5%
2	Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	04	02	02	25%
3	Applying: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	04	01	02	21.25%
4	Analyzing and Evaluating: Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	05	02	01	20%
5	Creating: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.	-	03	-	11.25%
	Total	20 (20)	10 (30)	06 (30)	100%

All questions would be compulsory. However, an internal choice of approximately 33% would be provided.

2) Internal Assessment: 20 Marks

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

Note: Objective Section would have 10 MCQ. Besides this, the section would include VSA, Assertion-Reasoning type questions etc.

SOCIAL SCIENCE
CLASS IX-X (2019-20)
(CODE NO. 087)

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 in understanding 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. Some elements of Sociology and Commerce are also included. 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 realise 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 (2019-20)

Theory Paper

Time: 3 Hrs.			Max. Marks: 80
No.	Units	No. of Periods	Marks
I	India and the Contemporary World – I	60	20
II	Contemporary India – I	55	20
III	Democratic Politics - I	50	20
IV	Economics	50	20
Total		215	80

COURSE CONTENT

Unit 1: India and the Contemporary World – I		60 Periods
Themes	Learning Objectives	
Section 1: Events and Processes: (All the three themes are compulsory)	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 would learn how to interpret these	

<p>I. The French Revolution:</p> <ul style="list-style-type: none"> • French Society During the Late Eighteenth Century • The Outbreak of the Revolution • France Abolishes Monarchy and Becomes a Republic • Did Women have a Revolution? • The Abolition of Slavery • The Revolution and Everyday Life <p>II. Socialism in Europe and the Russian Revolution:</p> <ul style="list-style-type: none"> • The Age of Social Change • The Russian Revolution • The February Revolution in Petrograd • What Changed after October? • The Global Influence of the Russian Revolution and the USSR <p>III. Nazism and the Rise of Hitler:</p> <ul style="list-style-type: none"> • Birth of the Weimar Republic • Hitler’s Rise to Power • The Nazi Worldview • Youth in Nazi Germany • Ordinary People and the Crimes Against Humanity <p>Section 2: Livelihoods, Economies and Societies: Any one theme of the following:</p> <p>IV. Forest Society and Colonialism:</p> <ul style="list-style-type: none"> • Why Deforestation? • The Rise of Commercial Forestry • Rebellion in the Forest • Forest Transformations in Java 	<p>kinds of historical evidences.</p> <ul style="list-style-type: none"> • Familiarize with the names of people involved, the different types of ideas that inspired the revolution, the wider forces that shaped it. • Know the use of written, oral and visual material to recover the history of revolutions. <ul style="list-style-type: none"> • Explore the history of socialism through the study of Russian Revolution. • Familiarize with the different types of ideas that inspired the revolution. <ul style="list-style-type: none"> • Discuss the critical significance of Nazism in shaping the politics of modern world. • Get familiarized with the speeches and writings of Nazi Leaders. <ul style="list-style-type: none"> • Discuss the social and cultural world of forest communities through the study of specific revolts. • Understand how oral traditions can be used to explore tribal
---	--

<p>V. Pastoralists in the Modern World:</p> <ul style="list-style-type: none"> • Pastoral Nomads and their Movements • Colonial Rule and Pastoral Life • Pastoralism in Africa 	<p>revolts.</p> <ul style="list-style-type: none"> • Highlight varying patterns of developments within pastoral societies in different places. • Analyse the impact of colonialism on forest societies, and the implication of scientific forestry. • Show the different processes through which agrarian transformation may occur in the modern world. • Analyse the impact of modern states, marking of boundaries, processes of sedentarization, contraction of pastures, and expansion of markets on pastoralism in the modern world.
<p>Unit 2: Contemporary India – I 55 Periods</p>	
<p>Themes</p>	<p>Learning Objectives</p>
<p>1. India</p> <ul style="list-style-type: none"> • Size and Location • India and the World • India’s Neighbours <p>2. Physical Features of India:</p> <ul style="list-style-type: none"> • Major Physiographic Divisions <p>3. Drainage:</p> <ul style="list-style-type: none"> • Major rivers and tributaries • Lakes • Role of rivers in the economy • Pollution of rivers 	<ul style="list-style-type: none"> • Identify the location of India in the Indian subcontinent. • Understand the major landform features and the underlying geological structure; their association with various rocks and minerals as well as nature of soil types. • Identify the river systems of the country and explain the role of rivers in the human society.

<p>4. Climate:</p> <ul style="list-style-type: none"> • Concept • Climatic Controls • Factors influencing India's climate • The Indian Monsoon • Distribution of Rainfall • Monsoon as a unifying bond <p>5. Natural Vegetation and Wild Life:</p> <ul style="list-style-type: none"> • Factors affecting Vegetation • Vegetation types • Wild Life • Conservation <p>6. Population:</p> <ul style="list-style-type: none"> • Size • Distribution • Population Growth and Process of Population Change 	<ul style="list-style-type: none"> • Identify various factors influencing the climate and explain the climatic variation of our country and its impact on the life of the people. • Explain the importance and unifying role of monsoons. • Explain the nature of diverse flora and fauna as well as their distribution. • Develop concern about the need to protect the biodiversity of our country. • Analyse the uneven nature of population distribution and show concern about the large size of our population. • Identify the different occupations of people and explain various factors of population change. • Explain various dimensions of National Population Policy and understand the needs of adolescents as underserved group.
--	--

Unit 3: Democratic Politics – I	50 Periods
--	-------------------

Themes	Learning Objectives
<p>1. What is Democracy? Why Democracy?:</p> <ul style="list-style-type: none"> • What is Democracy? • Features of Democracy • Why Democracy? • Broader Meaning of Democracy 	<ul style="list-style-type: none"> • Develop conceptual skills of defining democracy. • Understand how different historical processes and forces have promoted democracy. • Develop a sophisticated defense of democracy against common prejudices. • Develop a historical sense of the

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

<p>5. Democratic Rights:</p> <ul style="list-style-type: none"> • Life without rights • Rights in a Democracy • Rights in the Indian Constitution • Expanding the scope of rights 	<ul style="list-style-type: none"> • Recognize the need for rights in one's life. • Understand the availability /access of rights in a democratic system/government. • Identify and be able to comprehend the Fundamental Rights given by the Indian Constitution to its citizens. • Create awareness regarding the process of safeguarding rights.
--	---

Unit 4: Economics	50 Periods
--------------------------	-------------------

Themes	Objectives
<p>1. The Story of Village Palampur:</p> <ul style="list-style-type: none"> • Overview • Organization of production • Farming in Palampur • Non-farm activities of Palampur <p>2. People as Resource:</p> <ul style="list-style-type: none"> • Overview • Economic activities by men and women • Quality of Population • Unemployment <p>3. Poverty as a Challenge:</p> <ul style="list-style-type: none"> • Two typical cases of poverty • Poverty as seen by Social Scientists • Poverty Estimates • Vulnerable Groups • Interstate disparities • Global Poverty Scenario • Causes of Poverty • Anti-poverty measures • The Challenges Ahead <p>4. Food Security in India:</p> <ul style="list-style-type: none"> • Overview • What is Food Security? 	<ul style="list-style-type: none"> • Familiarize with basic economic concepts through an imaginary story of a village. • Understand the demographic concepts • Understand how population can be as asset or a liability for the nation. • Understand poverty as a challenge. • Identify vulnerable group and interstate disparities • Appreciate the initiatives of the government to alleviate poverty. • Understand the concept of food security

<ul style="list-style-type: none"> • Why Food Security? • Who are food insecure? • Food Security in India • What is Buffer Stock? • What is the Public Distribution System? • Current Status of Public Distribution System 	<ul style="list-style-type: none"> • Appreciate and analyse the role of government in ensuring food supply.
--	--

**PROJECT WORK
CLASS IX (2019-20)**

05 Periods	05 Marks												
<p>1. Every student has to compulsorily undertake one project on Disaster Management</p>													
<p>2. Objectives: The main objectives of giving project work on Disaster Management to the students are to:</p> <ol style="list-style-type: none"> create awareness in them about different disasters, their consequences and management prepare them in advance to face such situations ensure their participation in disaster mitigation plans enable them to create awareness and preparedness among the community. 													
<p>3. The project work should also help in enhancing the Life Skills of the students.</p>													
<p>4. If possible, various forms of art may be integrated in the project work.</p>													
<p>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.</p>													
<p>6. The distribution of marks over different aspects relating to Project Work is as follows:</p>													
<table border="1"> <thead> <tr> <th>S. No.</th> <th>Aspects</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>a</td> <td>Content accuracy, originality and analysis</td> <td style="text-align: center;">2</td> </tr> <tr> <td>b</td> <td>Presentation and creativity</td> <td style="text-align: center;">2</td> </tr> <tr> <td>c</td> <td>Viva Voce</td> <td style="text-align: center;">1</td> </tr> </tbody> </table>		S. No.	Aspects	Marks	a	Content accuracy, originality and analysis	2	b	Presentation and creativity	2	c	Viva Voce	1
S. No.	Aspects	Marks											
a	Content accuracy, originality and analysis	2											
b	Presentation and creativity	2											
c	Viva Voce	1											

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

Note: Please procure latest reprinted edition (2019) of prescribed NCERT textbooks.

SOCIAL SCIENCE (CODE NO. 087)

QUESTION PAPER DESIGN CLASS IX (2019-20)

Time: 3 Hours

Max. Marks: 80

Sr. No.	Typology of Questions	Objective Type (1 mark)	SA (3 marks)	LA (5 marks)	Map Skill	Total Marks	Weight age %
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	9	3	1	-	23	29%
2	Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	4	2	2	-	20	25%
3	Applying: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	3	1	2	-	16	20%
4	Analysing and Evaluating: Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	2	1	1	-	10	12%
5	Creating: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.	2	1	-	-	5	6.5%
6	Map Skill				3+3	6	7.6%
	Total	1x20=20	3x8 =24	5x6=30	6	80	100%

- Internal Assessment: 20 Marks

INTERNAL ASSESSMENT

	Marks	Description				
Periodic Assessment	10 Marks	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Pen Paper Test</td> <td style="text-align: center;">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 style="text-align: center;">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"> • Classwork • Work done (Activities / Assignments) • Reflections, Narrations, Journals, etc. • Achievements of the student in the subject throughout the year • Participation of the student in different activities like Heritage India Quiz 				
Subject Enrichment Activity	5 Marks	<ul style="list-style-type: none"> • Project Work 				

LIST OF MAP ITEMS CLASS IX (2019-20)

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

- 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)

Chapter - 6: Population (location and labelling)

- The state having highest and lowest density of population
- The state having highest and lowest sex ratio
- Largest and smallest state according to area

**COURSE STRUCTURE
CLASS X (2019-20)**

Theory Paper

Time: 3 Hrs.		Max. Marks: 80	
No.	Units	No. of Periods	Marks
I	India and the Contemporary World – II	60	20
II	Contemporary India – II	55	20
III	Democratic Politics - II	50	20
IV	Understanding Economic Development	50	20
Total		215	80

COURSE CONTENT

Unit 1: India and the Contemporary World – II		60 Periods
Themes	Learning Objectives	
Section 1: Events and Processes:		
1. The Rise of Nationalism in Europe:		
<ul style="list-style-type: none"> • The French Revolution and the Idea of the Nation • The Making of Nationalism in Europe • The Age of Revolutions: 1830-1848 • The Making of Germany and Italy • Visualizing the Nation • Nationalism and Imperialism 	<ul style="list-style-type: none"> • 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. • Establish the relationship and bring out the difference between European nationalism and anti-colonial nationalisms. • Understand the way the idea of nationalism emerged and led to the formation of nation states in Europe and elsewhere. 	
2. Nationalism in India:		
<ul style="list-style-type: none"> • The First World War, Khilafat and Non - Cooperation • Differing Strands within the Movement • Towards Civil Disobedience • The Sense of Collective Belonging 	<ul style="list-style-type: none"> • Recognize the characteristics of Indian nationalism through a case study of Non-Cooperation and Civil Disobedience Movement. • Analyze the nature of the diverse social movements of the time. • Familiarize with the writings and ideals of different political groups and individuals. • Appreciate the ideas promoting 	

<p>Section 2: Livelihoods, Economies and Societies: Any one theme of the following:</p> <p>3. The Making of a Global World:</p> <ul style="list-style-type: none"> • The Pre-modern world • The Nineteenth Century (1815-1914) • The Inter war Economy • Rebuilding a World Economy: The Post-War Era <p>4. The Age of Industrialization:</p> <ul style="list-style-type: none"> • Before the Industrial Revolution • Hand Labour and Steam Power • Industrialization in the colonies • Factories Come Up • The Peculiarities of Industrial Growth • Market for Goods <p>Section 3: Everyday Life, Culture and Politics:</p> <p>5. Print Culture and the Modern World:</p> <ul style="list-style-type: none"> • The First Printed Books • Print Comes to Europe • The Print Revolution and its Impact • The Reading Mania • The Nineteenth Century • India and the World of Print • Religious Reform and Public Debates • New Forms of Publication • Print and Censorship 	<p>Pan Indian belongingness.</p> <ul style="list-style-type: none"> • Show that globalization has a long history and point to the shifts within the process. • Analyze the implication of globalization for local economies. • Discuss how globalization is experienced differently by different social groups. • Familiarize with the Pro- to-Industrial phase and Early – factory system. • Familiarize with the process of industrialization and its impact on labour class. • Enable them to understand industrialization in the colonies with reference to Textile industries. • Identify the link between print culture and the circulation of ideas. • Familiarize with pictures, cartoons, extracts from propaganda literature and newspaper debates on important events and issues in the past. • Understand that forms of writing have a specific history, and that they reflect historical changes within society and shape the forces of change.
--	---

Unit 2: Contemporary India – II		55 Periods
Themes	Learning Objectives	
<p>1. Resources and Development:</p> <ul style="list-style-type: none"> • Types of Resources • Development of Resources • Resource Planning in India • Land Resources • Land Utilization • Land Use Pattern in India • Land Degradation and Conservation Measures • Soil as a Resource • Classification of Soils • Soil Erosion and Soil Conservation <p>2. Forest and Wildlife</p> <ul style="list-style-type: none"> • Biodiversity or Biological Diversity • Flora and Fauna in India • Vanishing Forests • Asiatic Cheetah: Where did they go? • The Himalayan Yew in trouble • Conservation of forest and wildlife in India • Project Tiger • Types and distribution of forests and wildlife resources • Community and Conservation <p>Note: The chapter 'Forest and Wildlife' to be assessed in the Periodic Tests only and will not be evaluated in Board Examination.</p> <p>3. Water Resources:</p> <ul style="list-style-type: none"> • Water Scarcity and The Need for Water Conservation and Management • Multi-Purpose River Projects and Integrated Water Resources Management • Rainwater Harvesting 	<ul style="list-style-type: none"> • Understand the value of resources and the need for their judicious utilization and conservation. • Understand the importance of forests and wild life in one environment as well as develop concept towards depletion of resources. • Comprehend the importance of water as a resource as well as develop awareness towards its judicious use and conservation. 	

Note: The chapter 'Water Resources' to be assessed in the Periodic Tests only and will not be evaluated in Board Examination.

4. Agriculture:

- Types of farming
- Cropping Pattern
- Major Crops
- Technological and Institutional Reforms
- Impact of Globalization on Agriculture

5. Minerals and Energy Resources

- What is a mineral?
- Mode of occurrence of Minerals
- Ferrons and Non-Ferrons Minerals
- Non-Metallic Minerals
- Rock Minerals
- Conservation of Minerals
- Energy Resources
 - Conventional and Non-Conventional
 - Conservation of Energy Resources

6. Manufacturing Industries:

- Importance of manufacturing
- Contribution of Industry to National Economy
- Industrial Location
- Classification of Industries
- Spatial distribution
- Industrial pollution and environmental

- Explain the importance of agriculture in national economy.
- 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.
- Explain various government policies for institutional as well as technological reforms since independence.
- Identify different types of minerals and energy resources and places of their availability
- Feel the need for their judicious utilization
- 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.
- Discuss the need for a planned industrial development and debate over the role of

<p>degradation</p> <ul style="list-style-type: none"> • Control of Environmental Degradation <p>7. Life Lines of National Economy:</p> <ul style="list-style-type: none"> • Transport – Roadways, Railways, Pipelines, Waterways, Airways • Communication • International Trade • Tourism as a Trade 	<p>government towards sustainable development.</p> <ul style="list-style-type: none"> • Explain the importance of transport and communication in the ever-shrinking world. • Understand the role of trade and tourism in the economic development of a country.
--	---

Unit 3: Democratic Politics – II	50 Periods
---	-------------------

Themes	Learning Objectives
<p>1. Power Sharing:</p> <ul style="list-style-type: none"> • Case Studies of Belgium and Sri Lanka • Why power sharing is desirable? • Forms of Power Sharing <p>2. Federalism:</p> <ul style="list-style-type: none"> • What is Federalism? • What make India a Federal Country? • How is Federalism practiced? • Decentralization in India <p>3. Democracy and Diversity:</p> <ul style="list-style-type: none"> • Case Studies of Mexico • Differences, similarities and divisions • Politics of social divisions <p><i>Note: The chapter 'Democracy and Diversity' to be assessed in the Periodic Tests only and will not be evaluated in Board Examination.</i></p> <p>4. Gender, Religion and Caste:</p> <ul style="list-style-type: none"> • Gender and Politics • Religion, Communalism and Politics • Caste and Politics 	<ul style="list-style-type: none"> • Familiarize with the centrality of power sharing in a democracy. • Understand the working of spatial and social power sharing mechanisms. • Analyse federal provisions and institutions. • Explain decentralization in rural and urban areas. • Analyse the relationship between social cleavages and political competition with reference to Indian situation. • Identify and analyse the challenges posed by communalism to Indian democracy. • Recognise the enabling and

<p>5. Popular Struggles and Movements:</p> <ul style="list-style-type: none"> • Popular Struggles in Nepal and Bolivia • Mobilization and Organization • Pressure Groups and Movements <p>Note: The chapter ‘Popular Struggles and Movements’ to be assessed in the Periodic Tests only and will not be evaluated in Board Examination.</p> <p>6. Political Parties:</p> <ul style="list-style-type: none"> • Why do we need Political Parties? • How many Parties should we have? • National Political Parties • State Parties • Challenges to Political Parties • How can Parties be reformed? <p>7. Outcomes of Democracy:</p> <ul style="list-style-type: none"> • How do we assess democracy’s outcomes? • Accountable, responsive and legitimate government • Economic growth and development • Reduction of inequality and poverty • Accommodation of social diversity • Dignity and freedom of the citizens <p>8. Challenges to Democracy:</p> <ul style="list-style-type: none"> • Thinking about challenges • Thinking about Political Reforms • Redefining democracy <p>Note: The chapter ‘Challenges to Democracy’ to be assessed in the Periodic</p>	<p>disabling effects of caste and ethnicity in politics.</p> <ul style="list-style-type: none"> • Develop a gender perspective on politics. • Understand the vital role of people’s struggle in the expansion of democracy. <ul style="list-style-type: none"> • Analyse party systems in democracies. • Introduction to major political parties, challenges faced by them and reforms in the country. <ul style="list-style-type: none"> • Evaluate the functioning of democracies in comparison to alternative forms of governments. • Understand the causes for continuation of democracy in India. • Distinguish between sources of strengths and weaknesses of Indian democracy. <ul style="list-style-type: none"> • Reflect on the different kinds of measures possible to deepen democracy. • Promote an active and participatory citizenship.
---	--

Tests only and will not be evaluated in Board Examination.	
Unit 4: Understanding Economic Development 50 Periods	
Themes	Objectives
<p>1. Development:</p> <ul style="list-style-type: none"> • What Development Promises - Different people different goals • Income and other goals • National Development • How to compare different countries or states? • Income and other criteria • Public Facilities • Sustainability of development <p>2. Sectors of the Indian Economy:</p> <ul style="list-style-type: none"> • Sectors of Economic Activities • Comparing the three sectors • Primary, Secondary and Tertiary Sectors in India • Division of sectors as organized and unorganized • Sectors in terms of ownership: Public and Private Sectors <p>3. Money and Credit:</p> <ul style="list-style-type: none"> • Money as a medium of exchange • Modern forms of money • Loan activities of Banks • Two different credit situations • Terms of credit • Formal sector credit in India • Self Help Groups for the Poor <p>4. Globalization and the Indian Economy:</p> <ul style="list-style-type: none"> • Production across countries • Interlinking production across countries • Foreign Trade and integration of 	<ul style="list-style-type: none"> • Familiarize with concepts of macroeconomics. • Understand the rationale for overall human development in our country, which includes the rise of income, improvements in health and education rather than income. • Understand the importance of quality of life and sustainable development. • Identify major employment generating sectors. • Reason out the government investment in different sectors of economy. • Understand money as an economic concept. • Understand the role of financial institutions from the point of view of day-to- day life. • Explain the working of the Global Economic phenomenon.

<p>markets</p> <ul style="list-style-type: none"> • What is globalization? • Factors that have enabled Globalisation • World Trade Organisation • Impact of Globalization on India • The Struggle for a fair Globalisation <p>5. Consumer Rights: <i>Note: Chapter 5 'Consumer Rights' to be done as Project Work.</i></p>	<ul style="list-style-type: none"> • Gets familiarized with the rights and duties as a consumer; and legal measures available to protect from being exploited in markets.
--	--

PROJECT WORK
CLASS X (2019-20)

05 Periods

05 Marks

1. **Every student** has to compulsorily undertake **any one project** on the following topics:

Consumer Awareness

OR

Social Issues

OR

Sustainable Development

2. **Objective:** 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.

Students are expected to apply the Social Science concepts that they have learnt over the years in order to prepare the project report.

If required, students may go out for collecting data and use different primary and secondary resources to prepare the project. If possible, various forms of art may be integrated in the project work.

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

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

Note: Please procure latest reprinted edition (2019) of prescribed NCERT textbooks.

SOCIAL SCIENCE (CODE NO. 087)
QUESTION PAPER DESIGN
CLASS X

Time: 3 Hours

Max. Marks: 80

Sr. No.	Typology of Questions	Objective Type (1 mark)	SA (3 marks)	LA (5 marks)	Map Skill	Total Marks	Weight age %
1	Remembering: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	9	3	1	-	23	29%
2	Understanding: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	4	2	2	-	20	25%
3	Applying: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	3	1	2	-	16	20%
4	Analysing and Evaluating: Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	2	1	1	-	10	12%
5	Creating: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.	2	1		-	5	6.5%
6	Map Skill				3+3	6	7.6%
	Total	1x20=20	3x8 =24	5x6=30	6	80	100%

- Internal Assessment: 20 Marks

INTERNAL ASSESSMENT

	Marks	Description				
Periodic Assessment	10 Marks	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Pen Paper Test</td> <td style="width: 20%; text-align: center;">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 style="text-align: center;">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"> • Classwork • Work done (Activities / Assignments) • Reflections, Narrations, Journals, etc. • Achievements of the student in the subject throughout the year • Participation of the student in different activities like Heritage India Quiz 				
Subject Enrichment Activity	5 Marks	<ul style="list-style-type: none"> • Project Work 				

LIST OF MAP ITEMS CLASS X (2019-20)

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 (Gujrat) - 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: The chapter 'Water Resources' to be assessed in the Periodic Tests only and will not 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

Minerals (Identification only)

a. Iron Ore mines

- | | |
|--------------|-------------|
| • Mayurbhanj | • Bellary |
| • Durg | • Kudremukh |
| • Bailadila | |

b. Coal Mines

- | | |
|------------|-----------|
| • Raniganj | • Talcher |
| • Bokaro | • Neyveli |

c. Oil Fields

- | | |
|---------------|---------------|
| • Digboi | • Bassien |
| • Naharkatia | • Kalol |
| • Mumbai High | • Ankaleshwar |

Power Plants

(Locating and Labelling only)

a. Thermal

- Namrup
- Singrauli
- Ramagundam

b. Nuclear

- Narora
- Kakrapara
- Tarapur
- Kalpakkam

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

Major Ports: (Locating and Labelling)

- 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.