INDEX

SYLLABUS FOR CLASS : X

SUBJECT- ENGLISH LANGUAGE & LITERATURE

Exam Structure

Section	Topic	Marks
A	Reading Skills	20
B	Writing Skills with Grammar	30
C	Literature Textbooks and Supplementary Reader Text	30
	Total	**80**

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

SECTION A : READING

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

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

Q.2: A Discursive passage of 350-400 words with four Short Answer type Questions to test inference, evaluation and analysis and four Objective Type Questions (including Multiple Choice Questions) to test vocabulary. [12 Marks]

SECTION B: WRITING AND GRAMMAR (30 Marks) 60 Periods

For writing tasks there will be internal choice

Q.3: Formal letter complaint / Inquiry / placing order / Letter to the editor / article in about 100-120 words. The questions will be thematically based on the prescribed books. [8 marks]

Q.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 in class X.

1. Tenses
2. Modals (have to/had to, must, should, need, ought to and their negative forms)
3. Use of passive voice
4. Subject – verb concord
5. Reporting
    - o (i) Commands and requests
    - o (ii) Statements
    - o (iii) Questions
6. Clauses:
    - o Noun clauses
    - o Adverb clauses of condition and time
    - o Relative clauses
7. Determiners
8. Prepositions

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

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

Q.6: Editing or omission. [4 marks]

Q.7: 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**

Q.8: One out of two extracts from prose/poetry/drama for reference to context. Four Objective Type Questions (including MCQs): Two questions of one mark each on global comprehension and two questions of 1 mark each on interpretation. [4 marks]

Q.9: 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) [2×5=10 marks]

Q.10: 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]

Q.11: One out of two Long Answer type Questions 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 - Textbook for Class X
- FOOTPRINTS WITHOUT FEET - Supplementary Reader for Class X

UNIT 1

Literature Reader-

F1- A Letter to God

Key Words- dotted, downpour, affixed, locusts, amiable

P1a)- Dust of snow

Key Words- hemlock, shook, rued

P1b)- Fire and Ice

Key Words – perish, suffice, avarice, rigidity

Supplementary Reader

Ch-1-A Triumph of Surgery

Key Words-rheumy, swooned, slopped, whimper, scrimmages

Writing section : Informal letter, e-mail, letter of inquiry

Grammar : Tenses, determiners

Activity : Listening task , Reading Comprehension

UNIT 2

Literature Reader-

F2- Nelson Mandela: Long Walk to Freedom

Keywords-inhumane, besieged, chevron, brutality, grimmest

P2-A Tiger in the Zoo

Key Words- vivid, lurking, patrolling baring, fangs, snarling

Supplementary Reader

Ch-2-The Thief's Story

Key Words- grunting, unlined, crept ,modestly, drizzle

Writing section : Formal letter, story writing ,article writing

Grammar : Subject-verb agreement, Voice

Activity : Practice of listening skill

: Speech on 'True liberty is freedom from poverty , deprivation and discrimination'

UNIT 3

Literature Reader-

F3- Two Stories about Flying

Key Words- expanse, beckoning, muster up, desperate, cackle, plaintively

P3a)- How to Tell Wild Animals

Key Words- twany, discern, novice, caress

P3b)-The Ball Poem

Key Words- rigid, intrude, epistemology, dime

Supplementary Reader

Ch-3-The Midnight Visitor

Key Words - wheezily, espionage, prosaic, inflection, gesture, deftly

Writing section: Speech writing, letter writing-placing order, diary entry

Grammar : Reported speech

Activity : Speaking Activity

: Presentation-'Progression of models of Airplanes' or 'Migratory Birds -Tracing Their Flights'

Grammar activity based on reported speech

UNIT 4

Literature Reader-

F4-From the Diary of Anne Frank

Key Words- persecutions, contrary, intimate, renowned, confide

P4- Amanda

Key words- slouching, sole, languid, tranquil, nagged, sulking

Supplementary Reader

Ch-4 A Question of Trust

Key Words- mended, persuaded, inconvenience, desperate

Ch-5 Footprints Without Feet

Key Words- brimming, whiskers, wagging, clergymen, witchcraft

Writing section: Story writing

Grammar : Modals

Activity : Practice of listening skills

: Writing of Diary entry

UNIT 5

Literature Reader-

F5- The Hundred Dresses –I

Key Words- nudge, hopscotch, courteous, exaggerated, exquisite

F6-The Hundred Dresses - II

Key Words- deliberately, coward, pretended, equalise

P6- Animals

Key words- kneel, negligently, placid, demented

Writing section: Letter of complaint, story writing

Grammar : Relatives

Activity : Role play on a given situation (Group activity)

UNIT 6

Literature Reader-

F7-Glimpses of India

Key Words- loaf, rebuke, parapet, commences, laidback, dwarfing

P7 –The Trees

Key words- exertion, disengage, scarcely, stumbling

Supplementary Reader

Ch-6 The Making of a Scientist

Key Words- mounting, equipment, monarch, entomology ,canoeist

Writing section: Formal letter, article, report

Grammar : Preposition

Activity : Practice of speaking skills

Topic : Tea – its qualities and evolution as a drink

Draft an advertisement for a tea brand

UNIT 7

Literature Reader-

F8-Mijbil the Otter

Key Words- squirmed, consulate, static, fumbling. chittering

P8- Fog

Key words-harbour, haunches

Supplementary Reader

Ch-7 The Necklace

Key Words-incessantly, despair, spitefully, intoxicated, dismay

Writing section: Business letter, informal letter

Grammar : Clauses

Activity : Practice of listening skills

Based on the text- Description of an animal you love.

UNIT 8

Literature Reader-

F9-Madam Rides the Bus

Key Words- wistfully, discreet, kindle, haughtily, repulsive

P9- The Tale of Custard the Dragon

Key words-wagon, spikes, strategically, flustered, squirm

Supplementary Reader

Ch-8 The Hack Driver

Key Words- summons, pursued, poker, hack, earnestly

Writing section : Report writing, formal letter writing

Grammar : Integrated grammar practice

Activity : Practice of speaking skills - A Memorable Trip

UNIT 9

Literature Reader-

F10-The Sermon at Benares

Key Words-lamentation, desolation, slaughter, afflicted, mortals

P-10 For Anne Gregory

Key Words- ramparts, folklore, mythology

Supplementary Reader

Ch-9 Bholi

Key Words-triumphed, scurried, throbbing, astonished, envious

Ch-10 The Book that Saved the Earth

Key Words-illustrated, apprentice, salutation, smacking, historiscope

Writing section **:** Speech, e-mail

Grammar : Tenses, Modals

Activity : Practice of speaking skill - Do you think Buddha's ideas and way of teaching continue to hold meaning for us?

UNIT 10

Literature Reader-

F11- The Proposal

Key words- petty, awfully, palpitations, reckoned, excruciating, embezzlement

Writing section, Story writing, debate, business letter

Grammar : Reported Speech, Determiners

Activity : Practice of listening and speaking skills

Speech – Anger Management

SYLLABUS- CLASS X

MATHEMATICS (041)

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;
- to 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 -X
(AS PER CBSE SYLLABUS)

Units	Unit Name	Chapter Name	Marks
I	NUMBER SYSTEMS	CH 1-REAL NUMBERS	**6**
II	ALGEBRA	CH 2-POLYNOMIALS	**20**
		CH 3-LINEAR EQUATIONS IN TWO VARIABLES	
		CH 4-QUADRATIC EQUATIONS	
		CH 5-ARITHMETIC PROGRESSION	
III	COORDINATE GEOMETRY	CH 7-COORDINATE GEOMETRY	**6**
IV	GEOMETRY	CH 6-TRIANGLES	**15**
		CH 10-CIRCLES	
		CH 11-CONSTRUCTIONS	
V	TRIGONOMETRY	CH 8-INTRODUCTION TO TRIGONOMETRY	**12**
		CH 9-APPLICATIONS OF TRIGONOMETRY	
VI	MENSURATION	CH 12-AREAS RELATED TO CIRCLES	**10**
		CH 13-SURFACE AREAS AND VOLUMES	
VII	STATISTICS & PROBABILTY	CH 14-STATISTICS	**11**
		CH 15-PROBABILITY	
	TOTAL		**80**

SYLLABUS PLAN TO BE FOLLOWED IN CLASS

Units	Chapter Name	Marks
I	CH 1-REAL NUMBERS	6
II	CH 2-POLYNOMIALS	3
	CH 5-ARITHMETIC PROGRESSION	7
III	CH 6-TRIANGLES	8
IV	CH 8-INTRODUCTION TO TRIGONOMETRY	8
	CH 9-APPLICATIONS OF TRIGONOMETRY	4
V	CH 7-COORDINATE GEOMETRY	6
VI	CH 3-LINEAR EQUATIONS IN TWO VARIABLES	3-5
	CH 4-QUADRATIC EQUATIONS	5-8
VII	CH 10-CIRCLES	3
	CH 11-CONSTRUCTIONS	4
VIII	CH 15-PROBABILITY	4
IX	CH 12-AREAS RELATED TO CIRCLES	7
	CH 14-STATISTICS	3
X	CH 13-SURFACE AREAS AND VOLUMES	7
	TOTAL	80

Unit I

CHAPTER 1: REAL NUMBERS (15) Periods

KEY WORDS : Lemma, Algorithm, Euclid's Division Algorithm, Fundamental Theorem of Arithmetic,

CONTENTS : 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 "2,"3, "5. Decimal representation of rational numbers in terms of terminating/non-terminating recurring decimals.

Activity 1 : To find the HCF of two numbers experimentally based on Euclid Division Lemma.

Unit II

CHAPTER 2: POLYNOMIALS

Keywords : Polynomial, Degree of polynomial, Constant polynomial, Linear polynomial, Quadratic polynomial, Cubic polynomial, Zero of a polynomial, Division algorithm.

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

Activity 2 : To draw the graph of a quadratic polynomial and observe:

(i) The shape of the curve when the coefficient of x^2 is positive.

(ii) The shape of the curve when the coefficient of x^2 is negative.

(iii) Its number of zeroes.

CHAPTER 5 : ARITHMETIC PROGRESSIONS

Keywords : Progression, Arithmetic Progression, Common difference, Term, nth term of A.P., Sum of n terms of A.P.

CONTENTS : Motivation for studying Arithmetic Progression Derivation of the nth term and sum of the first n terms of A.P. and their application in solving daily life problems.

Activitiy 3 : To find the sum of first n terms of A.P. by cutting and pasting. (Lab activity)

Unit III

CHAPTER 6 : TRIANGLES

Keywords : Triangle and its types, similar figures and similar triangles, Basic Proportionality Theorem, Area-Ratio theorem, Pythagoras Theorem, Similarity Criterion(AA, SSS, SAS, AAA, RHS)

CONTENTS : 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.

Activitiy 4 : To verify B.P.T./ Pythagoras theorem by paper cutting and pasting.

Unit IV

CHAPTER 8 : TRIGONOMETRY

Keywords : Trigonometric ratios, Complementary angles, Trigonometric Identities

CONTENTS : 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^o and 90^o. Values of the trigonometric ratios of 30^0, 45^0 and 60^0. Relationships between

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

CHAPTER 9: HEIGHTS AND DISTANCES (8) Periods

Keywords : Height, Distance, Line of sight, Angle of elevation, Angle of depression, Clinometer.

CONTENTS : Angle of elevation, Angle of Depression. 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 - V

CHAPTER 7 : COORDINATE GEOMETRY (14) Periods

Keywords : X-axis, Y axis, Origin, Point and its coordinates, Distance formula, Section formula, Mid-point formula, Area of triangle, Centroid of triangle and its coordinates,

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

Activity 5 : To verify the distance formula by graphical method.

OR

To verify the distance formula by graphical method.

Unit VI

CHAPTER 3 : PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

Keywords : Linear Equation, Solution of linear equation, Consistent system, Inconsistent system, Substitution method, Elimination method, Cross multiplication method.

CONTENTS : 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.

Activity 6 **:** To obtain the condition for number of solutions/inconsistency of a pair of linear equation in two variables by graphical method.(Lab activity)

CHAPTER 4 : QUADRATIC EQUATIONS

Keywords **:** Quadratic Equation, Zeroes or roots of quadratic equation, Discriminant, Nature of roots.

CONTENTS : Standard form of a quadratic equation $ax^2 + bx + c = 0$, *(a ‘“ 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.

Unit VII

CHAPTER 10: CIRCLES

Keywords **:** Circle and its related terms, Secant, Tangent, Length of tangent, Interior and exterior of circle.

CONTENTS : 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.

Activity 7 **:** To verify that lengths of tangents drawn from external point to a circle are equal by cutting and pasting.

CHAPTER 11: CONSTRUCTIONS

Keywords : Line segment, Acute angle, Similar triangle, Corresponding sides, Perpendicular bisector of chord, Tangent to circle.

CONTENTS : 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 VIII

CHAPTER 15: PROBABILITY

Keywords : Probability, Random experiment, Elementary Event, Sure Event, Impossible Event, Equally likely outcomes, Range of probability.

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

To get familiar with the idea of probability of an event through a double colour card experiment.

Unit IX

CHAPTER 14 : STATISTICS

Keywords : Data, Grouped Data, Ungrouped Data, Mean, Mode, Median, Ogive.

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

Activity 8 : To draw a cumulative frequency curve or an ogive of less/more than ogive.

CHAPTER 12: AREAS OF PLANE FIGURES

Keywords : Segment of circle, Sector of circle, Concentric circles, Perimeter of circle, Length of arc, Areas of circle, semicircle, quadrant, sector, segment.

CONTENTS : 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.)

Activity 9 : To verify areas of sectors formed at the vertices of a triangle is $\frac{\pi r^2}{2}$

Unit - X

CHAPTER 13 : SURFACE AREAS AND VOLUMES

Keywords : Polyhedron, Cuboid, Cube, Cylinder, Cone, Sphere, Hemisphere, Spherical shell, hemispherical shell, Frustum of cone, Surface area and volume of each solid written above.

CONTENTS : 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.

Activity 10 : To form a frustum of a cone.

Mathematics - Standard (041)
Question Paper Design
Class - X (2019- 20)

S. No.	Typology of Questions	Very Short Answer- Objective Type (VSA) 1 Mark	Short Answer -1 (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 concept, and answer.	**6**	**2**	**2**	**1**	**20**	**25**
2.	**Understanding :** Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving description, and stating main ideas	**6**	**1**	**1**	**3**	**23**	**29**
3.	**Applying :** Solve problems to new situation 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 opinion by making judgements 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	**20×1 = 20**	**6×2 = 12**	**8×3 = 24**	**6×4 = 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

हिन्दी पाठ्यक्रम (सत्र 2019 – 20)

कक्षा – X

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 अभिव्यक्त 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 पढकर समझ पाना और उसका आनंद उठाने की क्षमता का विकास करना।
- औपचारिक विषयों और संदर्भो 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 संदर्भो 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-करना। 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 बाचीत 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 अगल-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 संवदेनशील वातावरण निर्मित करना चाहिए।

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		
	अ अपठित गद्यांश (100 से 150 शब्दों के) (2×4) (1×1)	9	15
	ब अपठित काव्यांश लघु प्रश्न (विकल्प सहित) (2×3)	6	
2	व्याकरण के लिए निर्धारित विषयों पर विषय-वस्तु का बोध, भाषिक बिंदु /संरचना आदि पर प्रश्न (1×15)		
	1 शब्द और पद (1 अंक)	01	
	2 रचना के आधार पर वाक्य रूपांतर (3 अंक)	03	15
	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		
	अ गद्य खंड	10	
	1 पाठ्यपुस्तक स्पर्श के गद्य पाठों के आधार पर लघु प्रश्न (2×2) (1×1)	05	
	2 पाठ्य पुस्तक स्पर्श के निर्धारित पाठों (गद्य) पर एक निबंधात्मक प्रश्न (5×1) (विकल्प सहित)	05	
	ब काव्य खंड	10	25
	1 पाठ्यपुस्तक स्पर्श के काव्य खंड के आधार पर लघु प्रश्न (2×2) (1×1)	05	
	2 कविता की समझ पर आधारित एक निबंधात्मक प्रश्न (5×1) (विकल्प सहित)	05	
	स पूरक पाठ्यपुस्तक संचयन भाग-2	05	
	पूरक पाठ्यपुस्तक संचयन के निर्धारित पाठों से दो प्रश्न पूछे जाएगें जिसमें से एक प्रश्न 3 अंक (विकल्प सहित)(3×1) व दूसरा 2 अंक (2×1) का होगा।	05	
4	लेखन		
	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 (5×1)	5	
	ब औपचारिक विषय से संबधित पत्र।(5×1) (विकल्प सहित)	5	
	स एक विषय 20-30 शब्दों में सूचना लेखन (5×1) (विकल्प सहित)	5	
	द किसी एक स्थिति पर 50 शब्दों के अंतर्गत संवाद लेखन (5×1) (विकल्प सहित)	5	
	इ विषय से संबंधित 25-50 शब्दों के अंतर्गत विज्ञापन लेखन (5×1)	5	
	कुल		**80**

Unit - 1 स्पर्श पुस्तक पाठ - 1 कबीर साखी

व्याकरण - शब्द व पद, अशुद्धि शोधन, औपचारिक पत्र

Unit - 2 स्पर्श पुस्तक पाठ - 2 मीरा के पद

स्पर्श पुस्तक पाठ - 1 बड़े भाई साहब

व्याकरण-मुहावरे , संवाद लेखन, अनुच्छेद लेखन

क्रिया-कलाप नं: -1 (पठन-कौशल)

(बड़े भाई साहब और छोटे भाई के बीच आधुनिक शिक्षा प्रणाली के संबंध में संवाद लेखन) (पढ़ना और लिखना)

Unit - 3 स्पर्श पुस्तक पाठ - 2 डायरी का एक पन्ना

संचयन पुस्तक - 1 हरिहर काका

व्याकरण - वाक्य रूपांतरण, अनुच्छेद लेखन, सूचना लेखन

क्रिया कलाप नं: - 2 (लेखन कौशल)

'डायरी लेखन' मानव जीवन को वरदान या अभिशाप

Unit - 4 स्पर्श पुस्तक पाठ - बिहारी

स्पर्श पुस्तक पाठ - तताँरा - वामीरो कथा

व्याकरण - समास, विज्ञापन लेखन, अपठित गद्यांश

Unit - 5 पाठ - मनुष्यता

व्याकरण - सूचना लेखन, अपठित काव्यांश, मुहावरे, अशुद्धि शोधन

क्रिया कलाप नं: 3 (श्रवण कौशल) मनुष्यता कविता के आधार पर मनुष्य के गुणों का वर्णन

नोट :- अध्यापक प्रश्न देंगे/ Audio श्रव्य तथा छात्र उत्तर लिखेंगे।

Unit - 6 स्पर्श पुस्तक - पाठ अब कहाँ दूसरों के दुख में दुखी होने वाले

संचयन पुस्तक पाठ - 2 सपनों के से दिन

व्याकरण : वाक्य रूपांतरण, शब्द व पद, अनुच्छेद

क्रियाकलाप नं: 4 (भावात्मक कौशल)

मनुष्य का प्रकृति एवं जीव-जन्तुओं के प्रति व्यवहार

Unit - 7 स्पर्श पुस्तक - पाठ - तोप

स्पर्श पुस्तक - पाठ - पतझड़ में टूटी पत्तियाँ

(भाग - 1) गिन्नी का सोना

व्याकरण- समास, संवाद लेखन, औपचारिक पत्र

Unit - 8 स्पर्श पुस्तक पाठ - पर्वत प्रदेश में पावस

स्पर्श पुस्तक पाठ - पतझड़ में टूटी पत्तियाँ

(भाग - 2) झेन की देन

व्याकरण - मुहावरे, अनुच्छेद लेखन, विज्ञापन लेखन, अशुद्धि शोधन

क्रिया कलाप नं: 5 (रचनात्मक कौशल)

'स्पर्श पुस्तक' में दिए गए मुहावरों का संग्रह करें।

Unit - 9 स्पर्श पुस्तक पाठ - कर चले हम फ़िदा

स्पर्श पुस्तक पाठ - कारतूस

संचयन पुस्तक पाठ - 3 टोपी शुक्ला

व्याकरण - सूचना लेखन, वाक्य रूपांतरण, औपचारिक पत्र

Unit - 10 स्पर्श पुस्तक पाठ - आत्मत्राण

व्याकरण - संवाद लेखन, समास, अनुच्छेद लेखन, अपठित काव्यांश

नोट:- गतिविधियों के संबंध में जानकारी अध्यापिका के द्वारा दी जाएगी।

Syllabus - 2019 - 20

Class - X

Subject - Punjabi

gkm g;seK L ;kfjse or Gkr dik

;kfjse feoBK Gkr dik

ftnkeoB

elb nie 80

IH gVB-eôb (Reading Skill) **15**

1H nDfvmk gok (tkose) 200-250 ôpdK ftu

uko SN gôB (20202020) 01 nie f;oby bJh 9

2H nDfvmh ekft NeVh Bkb ;pfXs (fsB gôB) (3%2) &6

IIH ftnkeoB (pjftebgh ns SN gôB) **(Grammer)** **20**

1H ;wk;h ôpd (pjftebgh) 4

2H pjnoEe (pjftebgh) 4

3H fefonk ftôôD (pjftebgh) 4

4H nrso-fgSso (SN gôB) 4

5H wjkto (e sMsle) (SN gôB) 4

IIIH gGktôkbh fbyD-eôb (Grammer) **25**

1H by-ouBk (ftuko gdkB ns nkw ftô) 200 ôpd 10

(**fsB by uD nXkfos** - BefsnK ;fjs)

2H glso ouBk (fBihs dcsoh) 08

(**d glso uD nXkfos** - BefsnK ;fjs)

3H fJôfsjko iKs;tho d nkXkos toBD (50 ôpdK ftu) 07

IVH gkm-g;seK s nXkfos (Text Books) **20**

1H nfs SNgôB (1 ne tkb)

T) ejkDhs tkose ftlu (pj-ftebgh) 4

n) eftsk s fJeKrh ftlu (fJle ôpd tkb) 4

2H SNgôB-Tlso 2 ne tkb (25 s 30 ôpdK ftlu) (3%2) &6

(ejkDhs ihtBh ftlu)

3H tlv Tlso K tkb gôB (50 s 60 ôpdK ftlu) (1%3) &3

(eftsk, tkose ftu) (uD nXkfos)

4H fJeKrhÓu (50 s 60 ôpdK ftlu) (1%3) &3

(uD nXkfos)

fBoXkfos gkm-g;seK

1H ;kfjse feoBK - 2

ekft-ouBktK - 1H rTVh pokrfD (ro nwodk; ih)

2H rw Bo;Jh ftlu (eôwho Bho)

3H ro-Tgdô (gtB joudgoh)

4H wkD-gikph dk (ebts f;x oøhe)

tkose - 1H nkdsK (okfido f;x)

2H jeV ns jTw dh wko (vkH jofôdo eo)

3H glS dhnK gD eDhnK (ghsw ogkb)

4H gikp d be rhs (sfido eo)

5H ebkswe ouhnK L gfeosh ns gfjukD (vkH dftdo ;øh)

2H ;kfjseor-2

ejkDhnK - 1H wfe; s xN Bjh (doôB f;x nkôN)

2H Jhno cB (pbftdo f;x ;Yh)

3H dôwDh (pbftdof;x pokV)

fJeKrh - pp okw GiBh (gH nkJhH;hH Bdk)

ihtBhnK - 1H phph GkBh ih (;yftdo eo)

2H TlvDk f;ly- fwbykf;x (gekô f;x frlb)

3H nDEle ftfr nkBh - vkH npdlb ebkw

(vkH fgEthoki Ekgo)

fBoXkos rshftXhnK (Suggested Topics for Activity)

1H ;by 2H eftsk TukoB (ipkBh)

3H GkôD wekpbk 4H tkd-ft tkd

5H efJ÷ (gôBsoh) 6H BkNe wuD

7H fdB-fsTjko pko ikDekoh 8H berhs

9H goksB ;lfGnkuko 10H ubs xNBktK dk toDB

BN- 1Hftfdnkoeh dk wbKeD Tgoes fdls rJ fdôk-fBodôK nB;ko ehsk ikt.

2H wbKeD ftô Bkb ;pXs nfXnkge s ;eb wyh tlb fBoXkos nfXnkge dh fBrokBh jm jtrk.

Unit - 1

ejkDh - w fe; sh xlN Bjh

ihtBh - phph GkBh ih

ftnkeoB - wjkto (e) nlyo tkb

nDfvlmk gok - ;wk;h ôpd

rshftXh - ;by

Unit - 2

ôpd - rTVh pokrfD wjbk -3

tkose - glS dhnK gD eDhnk

ftnkeoB -wjkto (y) nlyo tkb

glso - fBlih

Unit - 3

ejkDh - Jhno cB

tkose - nkdsK

ftnkeoB - (r) nlyo tkb, pj noEe ôpd (pjftebgh)

nDfvlmh ekft - NeVh

by - ftuko gXkB ns nkw ftô

rshftXh - eftsk TukoB

Unit - 4

tkose by - ebkswe ouhnK - gfeosh ns gfjukD

glso - fBlih

wjkto - (x) nlyo tkb

fJôfsjko

rshftXh - ejkDh byD

Unit - 5

fJeKrh - ppokw GiBh

fulso toBD

ftnkeoB - nrso, fgSso

Unit - 6

ihtBh - fwbykf;x

eftsk - rwBo;Jhftu

wjkto - (u) nlyo tkb

fefonkftôôD

rshftXh - goksB ;fGnkuko dhnk nbg j ojhnK uhiK pko ikDekoh gkgs eoe ukoNfsnko eo.

Unit - 7

ejkDh - dôwDh

tkose - jeV ns jTw dh wko

nDfvlmh ekft - NeVh

wjkto - (S) nlyo tkb

glso - døsoh

Unit - 8

ihtBh - vka npdb ebkw

eftsk - ro Tgdô

wjkto - (i) nlyo tkb

fulso toBD, n rso

;wk;h ôpd

Unit - 9

tkose - gikp d be rhs

wjkto - (M) nlyo tkb

fJôfsjko, fgSso

pj noEe ôpd

rshftXh - be- rhsKs nXkfos

Unit - 10

eftsk - wkD gikph dk

fJeKrh - pp okw GiBh

djokJh - fefonkftôôD, fJôfsjko

fulso toBD

SCIENCE SYLLABUS

(Code No. 086)

CLASS 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 being 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 weightage 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 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	

UNIT-I

1. Chemical reactions and equations: Chemical equation-forms and balancing.

2. Light reflection and refraction- 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.

Practical: Determination of the focal length of:

i) Concave mirror

ii) Convex lens

By obtaining the image of a distant object.

3. Life processes: Nutrition in plants and animals, respiration

Practical – (i) To prepare a temporary mount of a leaf peel to show stomata.

(ii) To show experimentally that carbon dioxide is given out during respiration.

UNIT-II

1. Chemical reactions and equations.

Types of chemical reactions: Combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation and reduction.

PRACTICAL : 1. 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 quick lime

(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

2. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:

b $ZnSO_4$ (aq)

c $FeSO_4$ (aq)

d $CuSO_4$ (aq)

e $Al_2(SO_4)_3$ (aq)

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

2. Light-reflection and refraction—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.

Practical-

a) 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.

b) 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.

3. Life processes — Transportation & excretion in plants and animals

UNIT-III

1. **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.

PRACTICAL: Finding the pH of the following samples by using pH paper / universal indicator:

a) Dilute Hydrochloric Acid

b) Dilute NaOH solution

c) Dilute Ethanoic Acid Solution

d) Lemon juice

e) Water

f) Dilute Hydrogen Carbonate solution

2. Human eye and the colourful world- Functioning of a lens in human eye, power of accommodation, defects of vision and their corrections.

3. Control and co-ordination: Control and coordination in animals,reflex action. Human brain; nervous tissue. Plant coordination and plant hormone.

UNIT IV

1. Acids, bases and salts

Preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.

PRACTICAL:

Studying the properties of acids and bases (HCl&NaOH) by their reaction with:

a) Litmus solution (Blue/Red)

b) Zinc metal

c) Solid sodium carbonate

2. Human eye and the colourful world- Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.

PRACTICAL- Tracing the path of the rays of light through a glass prism.

3. Control and co-ordination: Chemical Coordination in animals, animal hormones.

UNIT - V

1. Metals and nonmetals :

Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds.

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

3. **How do organisms reproduce-** The importance of variation, Asexual reproduction, vegetative propagation, tissue culture, spore formation. Sexual reproduction in flowering plants. Reproduction in human being.

PRACTICAL - (i) To study (a) binary fission in Amoeba and (b) budding in yeast with the help of prepared slides.

(ii) To identify the different parts of an embryo of a dicot seed (Pea, gram or red kidney bean).

UNIT - VI

1. Metals and nonmetals :

Basic metallurgical processes;Corrosion and its prevention.

2. Electricity- Electric current, potential difference and electric current. Ohm's law; Resistance, resistivity, Factors on which the resistance of a conductor depends.

PRACTICAL- 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.

3. How do organisms reproduce: Male and female reproductive system, Reproductive health, need for reproductive health and methods of family planning HIV/AIDS. Child bearing and women's health.

UNIT - VII

1. **Carbon compounds:**

Covalent bonding in carbon compounds. Versatile natureof carbon. Homologous series. Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes, alkanes and alkynes), difference between saturated hydrocarbons and unsaturated hydrocarbons.

2. **Electricity-** Series combination of resistors, parallel combination of resistors and its applications in domestic electric circuit. Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R.

PRACTICAL- Determination of the equivalent resistance of two resistors when connected in series and parallel.

3. **Heredity and evolution-**Heredity; Mendel's contribution- Laws for inheritance of traits, Sex determination.

UNIT -VIII

1. Carbon compounds

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

PRACTICALS : 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

PRACTICAL: Study of the comparative cleaning capacity of a sample of soap in soft and hard water.

2. Magnetic effects of electric current- **:** Magnetic field, field lines, field due to a currentcarrying conductor, field due to current carrying coil or solenoid;

3. Heredity and evolution-Basic concepts of evolution.

UNIT - IX

1. Periodic classification of elements :

Need for classification, early attemptsat classification of elements (Dobereiner's Triads, Newland's Law of Octaves, and Mendeleev's Periodic Table)

2. Magnetic effects of current- Force on current carrying conductor, Fleming's Left Hand Rule, Electric Motor. Electromagnetic induction. Induced potential difference, Induced current.

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

UNIT - X

1. Periodic classification of elements

Modern periodic table, gradation in properties, valency, atomic number, metallic and non-metallic properties.

2. Magnetic effects of current- Fleming's Right Hand Rule, Electric Generator, and Direct Current. Alternating current: frequency of AC. Advantage of AC over DC. Domestic electric circuit.

3. 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. The Regional environment: Big dams: advantages and limitations; alternatives if any. Water harvesting. Sustainability of natural resources.

QUESTION PAPER DESIGN

Class: 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.

CLASS-X

SUBJECT- SOCIAL SCIENCE (087)

Books Presecribed :

1.	India and the Contemporary World- II	20 marks
2.	India- Resources and their Development	20marks
3.	Democratic Politics II	20 Marks
4.	Understanding Economic Development II	20 Marks

RATIONALE :

Social Science is compulsory subject upto secondary stage of school education. It is an intergral 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 citizens with necessary attributes and skills for being able to participate and contribute effectively in the process of development and nation-building.

The social sciences curriculum draws its content mainly from geography, history, civics 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 study 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.
- to make learners realise that the process of change is continuous and any event or phenomenon or issue cannot be viewed in isolation but it a wider context of time and space.

- to 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.
- to deepen knowlege about the 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.
- to 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.
- to 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.
- to facilitate the learners to understand and appreciate the diversity in the land and people of the country with its underlying unity.
- to develop an appreciation of the richness and variety of India's heritage-both natural and cultural and the need for its preservation.
- to promote an understanding of the issues and challenges 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.
- to develop scientific temper 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.

- to 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.
- to develop qualities clustered around the personal, social, moral, national and spiritual values that make a person humane and socially effective.

(I) UNIT TEST : 20 MARKS

Q.No.	Marks
1-7	1*7=7
8-9	3*2=6
10	1*5=5
11(map question)	1*2=2
TOTAL	20 Marks

(II) MID TERM/FINAL EXAMINATION : 80 MARKS

Q.NO.	MARKS
1-20	1*20=20
21-28	3*8=24
29 - 34	5*6=30
35(MAP QUESTION FROM HISTORY)	1*3=3
36(MAP QUESTION FROM GEOGRAPHY)	1*3=3
TOTAL	80 MARKS

CLASS 10

SYLLABUS OF SOCIAL SCIENCE(087)

Few chapters in geography, democratic politics and economics are to be assessed in the periodic tests only and will not be evaluated in board examination.

- **Geography**

CH – 2 Forest and wildlife

CH – 3 Water Resources

- **Democratic politics**

CH – 3 Democracy and diversity

CH – 4 Popular struggles and movements

CH – 8 Challenges to democracy

- **Economics**

Ch – 5 Consumer rights (to be done as project work)

Unit -1

- **Geography-**

Ch.1 Resources and Development

Formative Assessment : - Role play on resource, exhibiting it's importance and need for conservation

Key Words : - Abiotic, Afforestation, Biotic, Conservation, Gully Erosion, Land Degradation.

- **Democratic Politics-**

Ch.1 Power Sharing

Formative Assessment : - Project work- Prepare a chart or ppt on Power Sharing Arrangement in Belgium and Sri Lanka.

Key Words : - Ethnic, Majoritarianism, Civil War, Coalition Government, Prudential

- **3. Economics - Unit -1**

Ch.1 The Story Of Development

Formative Assessment : - Calculate the BMI of different economic status people above 18 years of age.

Key words : - Economy, National Income, Production, Per Capita Income, Infant Mortality Rate

Unit -2

- **History-**

Ch.3 Nationalism in India

Key Words : - Nation states, Satyagraha, Martial Law, Begar, Dominion Status, Picketed

- **Economics**

Ch.2 Sectors of the India Economy

Formative Assessment: - Group Discussion on Creating Employment Opportunities.

Key Words : - Primary Activities , Secondary Activities, Tertiary Activities, Gross Domestic Product, Intermediate Goods

Ch -2 Federalism

Key Words : - Linguistic Policy, Jurisdiction, Coming Together Holding Together, Decentralisation

Unit-3

- **Geography-**

(Ch.1 Water Resources) – For Periodic Test

Formative Assessment : - Map Filling- Locate and Label the following Dams and draw the rivers on which they are (Hirakud, Tungabhadra, Bhakra-Nangal, SardarSarovar, Gandhi-Sagar Dam, Mettur, NagarjunaSagar and Salal Project).

Write how a particular dam in a flood prone area has recently failed to prevent a flood. Find out why it happened? Could this be avoided? How?

Key Words : - Dam, Ground Water, Hydro-Electricity, Mutli-Purpose Projects, Water Scarcity, Rain-Water Harvesting.

Ch.4 Agriculture

Formative Assessment : - Find out different regions of India practicing the following types of farming and discuss the nature of farming- 1. Intensive Subsistence Farming 2. Plantation 3. Primitive Subsistence Farming 4. Commercial Farming 5. Mixed Farming

Key Words : - Commercial Agriculture, Hoticulture, Plantation, Minimum Support Price, Kharif Season, Rabi Season.

Ch.7 Print Culture and the Modern World

Formative Assessment : - Source Based Question

Key Words : - Calligraphy, Compositor, Galley, Ballad, Protestant Reformation, Chap Books, Inquistion, Heretical, Seditious, Almanac, Despotism, Ulema, Fatwa.

Unit-4

3. Democratic Politics-

Ch.3 (Democracy and Diversity) – for periodic test

Key Words : - African-American, Homogenous, Black Power, Civil Rights, Migrants Feminist, Communalism, Patriarchy, Family Laws, Urbanization

Ch -3 CIVICS

Gender Religion and caste

Ch.3 Economics

Money and Credit

UNIT-5

History-

Ch 6- (Popular Struggles and Movements) – for periodict Test

Ch.4 Globalisation and The Indian Economy

Formative Assessment : - Visit to a Bank

Key Words : - Barter System, Credit, Debt, Collateral, Cheque, Self help Group

- Globalisation, Liberalisation, Multi-National Corporation, Trade Barriers, Foreign Trade

Unit-6

Ch.5 Minerals and Energy Resources

Formative Assessment - Consumption of Electricity- A survey

Map Filling on Minerals

Key Words : - Conventional Resources, Non-Conventional Resources, Placer Deposits, Quarrying, Shaft Mining

Ch.6 Manufacturing Industries

Key Words :-Agro-Based Industries, Consumer Industries, Manufacturing, Integrated Steel Plant, Heavy Industries

Democratic Politics-

Ch.6 Political Parties

Political Parties - Partisan, Defection Law, Affidavit, Regional Parties

UNIT- 7

Ch -1 (History) – Europe and the modern world

Ch.7 Outcomes of Democracy

UNIT- 8

Ch.7 Life Lines of National Economy

Key Words :-Balance of Trade, Border Roads, Golden Quadrilateral, Harbour, Terrestrial, Barometer

Ch.4 (History) – The Age Of Industrialisation

Democratic Politics-

Ch.8 (Challenges of Democracy) – for periodic tests

Key Words : - Accountable, Responsive, Legitimate

-Transparency , Economic Inequality

Unit - 9

- **History-**

Ch.3 Nationalism in India

Key Words : - Nation states, Satyagraha, Martial Law, Begar, Dominion Status, Picketed

Ch.4 Globalisation and The Indian Economy

Formative Assessment : - Visit to a Bank

Key Words : - Barter System, Credit, Debt, Collateral, Cheque, Self help Group

- Globalisation, Liberalisation, Multi-National Corporation, Trade Barriers, Foreign Trade

Ch.5 (Consumer Awareness) – for periodic tests

Formative Assessment : - Advertisement on Consumer Consciousness

Key Words :-Exploitation, Redressal, Consumer Courts, Adulteration

Unit-10

Ch.6 Political Parties

Political Parties- Partisan, Defection Law, Affidavit, Regional Parties

Ch.7 Print Culture and the Modern World

PROJECT WORK

Every student has to compulsorily undertake any one project on the following topics

CONSUMER AWARENESS

Or

SOCIAL ISSUES

Or

SUSTAINABLE DEVELOPMENT

List of map items – 2019-20

HISTORY – outline political map of india

CH - 3 nationalism in india – locating and identification

1. Indian national congress sessions

a) Calcutta (sept 1920)

b) Nagpur (dec 1920)

c) Madras (1927)

2. Important centres of Indian national movements

3. 1. ChauriChaura (U.P.) - Calling of Non - Co-operation Movement
4. 2. Bardoli (Gujrat) - No Tax Campaign
5. 3. Dandi (Gujrat) - Civil Disobedience Movement
6. 4. Champaran (Bihar) - Movement of Indigo Planters
7. 5. Amritsar (Punjab) - JallianwalaBagh Incident
8. 6. Kheda (Gujrat) - Peasant Satyagraha
9. 7. Ahemdabad - Cotton mill workers

(MAP WORK)

Ch. 1 Resources and Development

Identification only - major soil types

Ch. 3 Water resources(only for class tests)

Locating and Labelling - Dams- Salal, Bhakra-Nangal, Tehri, RanaPratapSagar, Hirakud, NagarjunaSagar Tungabhadra

Ch. 4 Agriculture

Identification and also for locating and labelling

1. Major areas of rice and wheat

2. Major producing states of Sugarcane, Tea, Coffee, Rubber, Cotton, Jute, Millets and Maize

Geography

Ch.5 minerals and energy resources

Identification only

1. Iron Ore Mines - Mayurbhanj, Durg, Bailadila, Bellary And Kudremukh
2. Bauxite Mines - Koraput, Katni, Amarkantak, Bilaspur
3. Mangenese Mines - Sundergarh, Balaghat, Shimaga, Nagpur
4. Mica Mines- Ajmer, Beawar, Nellore, Gaya, Hazaribagh
5. Coal Mines- Raniganj, Jharia, Bokaro, Talcher, Korba, Singrauli, Singareni, Neyrali
6. Oil Fields- Digboi, Naharkatia, Mumbai high, Bassian, Kalol and Ankaleshwar

7. Power Plants- Thermal and Nuclear

   Thermal- Namrup, singrauli, Ramagundam, Loktak, Barauni, Korba, Delhi, Uran, Vijaywada and Tuticorin

   Nuclear- RawatBhata, Kakrapara, Kalpakkam, Tarapur, Narora

Ch.6 Manufacturing Industries (Locating and Labelling)

1. Cotton Textile Industries- Mumbai, Pune , Aurangabad, Indore, Ahemdabad, Surat, Agra, Kanpur, Muradabad, Chennai, Coimbatore and Madurai
2. Woollen Industries- Srinagar, Anantnag, Baramula, Ludhiana
3. Silk- Murshidabad, Bankura, Kolar, Mysore and Bangalore
4. Iron and Steel Plants- Burnpur, Durgapur, Bokaro, Jamshedpur, Rourkela, Bhilai, Vijaynagar, Bahdravati, Vishakapatnam and Salem
5. Software Technology Parks- Mohali, Srinagar, Noida, Jaipur, Gandhinagar, Indore, Mumbai , Hyderabad, Bangalore, Mysore, Chennai, Thiravantampuram, Pune, Guwahati, Kolkata

Ch.7 Lifelines of national Economy (Identification)

1. Golden Quadrilateral- North South Corridor and East West Corridor
2. National Highways- NH-1, 2, 3, 4, 5, 7, 8, 16 and 17

   (Locating and Labelling)

1. Major Ports- Kandla, Mumbai, Marmago, New Manglore, Kochi, Tuticorin, Chennai, Vishakapatnam, Paradip, Haldia and Kolkata
2. International Airports- Amritsar, Delhi, Mumbai, Thiruvantampuram, Chennai, Kolkata and Hyderabad

SYLLABUS

Subject : Computer Applications

Class : X

Book : Computer Applications

Publisher : Dhanpat Rai & Co.

Exam : Written/ Practical Test + Activity

Unit-1

Chapter - 1 : Internet Basics

Keywords – Routers, Virtual Hosting, Domain, Intranet, Website, Web Pages

ACTIVITY : 1. A presentation on various types of web browsers and their comparative features.

Unit-2

Chapter – 2 : Internet Services and Mobile Technologies

Keywords – Protocols, downloading, uploading, video conferencing, blogs, Email, Social Networking, Mobile Technologies

ACTIVITY : 1. Make a power point presentation on Internet services.

2. Make a list of Social Networking sites and services available for protection

Unit-3

Chapter – 3 : HTML-1: Basic HTML Elements

Keywords – Hypertext, markup, tags, browser, Attribute, Lists in HTML

ACTIVITY : 1. Lab Activity on Page 174 to 176

2. Design a home page for the school

Unit-4

Chapter – 4 : HTML-II : Images, Links and Tables

Keywords – Anchors, Links, HREF, cellpadding, cellspacing, colspan, rowspan, spanning

ACTIVITY : 1. Write HTML code to generate a Web Page to show the concept of External Linking using Tables, Images and Links.

Unit-5

Chapter – 5 : Cascading Style Sheets (CSS)

Keywords : Static, Dynamic, style sheets

ACTIVITY : Create a CSS file using the parameters given in the chapter.

Unit-6

Chapter – 6 : Cyberethics

Keywords: Cyberethics, e-commerce, Ethical issues, Open Source

ACTIVITY : Create a blog on cyberethics.

Unit-7

Chapter – 7 : Scratch Programming-II

Keywords : Variable, Events, iteration

ACTIVITY : Create Scratch programs using different Event options.

Note: Submit Activity File with a Project.

Computer Application(Code no. 165)	
Theory	30 marks
Practical	70 marks
Total Marks	100 marks

Pattern and syllabus bi-furcation for Computer paper

Periodic Tests

MCQs	3 marks
Short Questions	7 marks
Long Questions	10 marks

Terminal Examination

Section-A	
3 MCQ	1 mark each
3 Very Short Questions	1 mark each
Section- B	
5 Short Questions	2 marks each
3 Long Questions	3 marks each
1 Practical Based Questions	5 marks each

MUSIC AND DANCE

CLASS - X

Objective : Music and dance are one of these activities that not only inculcate the values of there spirit but also help in enhancing self- confidence and wholesome personality of individual. Its creates creative expression and sharpen the senses through keen observation.

- It helps in creating awarness of art forms.
- Develops skills in use of various tools, instruments etc.
- Encourages a child to explore and experiment.
- It also helps developing asthetic sensiblities.
- Respect for social values and cultural heritage.

Art (Music Dance) refiness the sense of application of the beauty of nature through basic elements of this form

FIRST TERM

1. Shabad/ Prayer
2. National Anthem
3. English songs
4. Devotional / Patriotic songh
5. Folk songs

6. Classical dance

7. Western dance

8. Theme based dance performance

9. Religious dance

10. Different folk dances

SECOND TERM

1. Community song/ National song

2. Knowledge of Taals/ Acankars

3. Shabad/ Prayer

4. Bhajans

5. Patriotic/ Classical songs

6. semi classical dance

7. Punjabi dance

8. Different western dance forms

9. Combination of different classical dances

10. Vandana

SYLLABUS – HEALTH AND PHYSICAL EDUCATION

CLASS – X

STRAND 1

GAMES/SPORTS – At least one of following:

A) Athletics or Swimming

B) Team Games

C) Individual Games

D) Adventure Sports

STRAND 2

Health and

Fitness

2.2 THE OBJECTIVES:

Regular, high quality PE programs should also provide all students with opportunities to develop:

2.2.1 An inclination towards, and strong motivation for lifelong maintenance of health and fitness *

2.2.2 Cardiovascular fitness, muscular endurance, muscular strength and flexibility to meet the demands of everyday life *

2.2.3 Agility, balance, coordination, reaction time, power and speed to be able to perform a wide range of daily tasks *

2.2.4 The techniques necessary to become a skillful performer and competitor in different sports and activities *

2.2.5 Such traits of character as self-mastery, discipline, courage, determination and confidence *

2.2.6 Good sports personship, fair play and ability to be an informed spectator *

2.2.7 An ability to perform in different activity – related roles such as attacker, defender, supporter, supported, referee, leader, captain.

STRAND 1: GAMES / SPORTS

(A) Any one or more games or activity out of Athletics/ Swimming, Team Games, Individual

Games and Adventure Sports must be taken up by each student as an individual, or as a class Team or as a school team.

(B) Team Games

Examples of team games

- **Invasion Games:** Basketball, Hockey, Kabaddi, Netball, Gallery, Football, Water Polo, Judo, Karate/ Self Defence
- **Net Games:** Lawn Tennis, Table Tennis, Badminton, Squash Volleyball
- **Inning Games:** Cricket, Kho-Kho, Rounders, Softball, Stoolball
- **Target Games:** Archery, Boccia, Bowls, and Golf

(C) Individual Games

Gymnastics, Skating, Judo, Wrestling, Boxing, Fencing, etc.

(D) Adventure Sports

Trekking; Nature Bathing (walking in natural surroundings, such as forests, mountains, alongside rivers, etc.), wall/rock climbing; rappelling; camping; rafting; mountain biking; skiing; personal survival and lifesaving, first-aid, etc.

STRAND 2: HEALTH AND FITNESS

In Mass P.T. / Yoga. Any other activity, which leads to a connection of the physical body with the mind and with the inner workings of the body, and also leads to an improvement in overall health and fitness, can also be taken up, such as:

Aerobics,

Dance,

Calisthenics,

Jogging,

Cross Country Run working out using weights/gym equipment

STRAND 3 : SEWA (Social Empowerment through Work Education and Action)

Introduction

SEWA aims to develop a whole person in their intellectual, personal, social, emotional and social growth. Learners engaged in this program are expected to be life-long learners and through experiential learning develop as active citizens and carying and compassionate humans. The experiental and constructive modes of learning emphasize the immediate Personal experience of the learner and view learning as a process.

SEWA takes learning beyond the walls of the classroom and sometimes even beyond the boundaries of the school, building bridges with the authentic and real world in meaningful and positive ways.

Objective :

There is an urgent need to foster strong mental and social health amongst today's children so that they can connect with their peers, their elders, the community, the environment, etc.

The main objective of the SEWA projects is to direct children's mind in constructive activities with positive outcomes through the facilitation of creative and critical thinking. This would help them to develop self-confidence and self-esteem.

Another objective of this programme is to underline the significance of the interdependence of all human beings and our dependence on the environment in this shrinking global village.

SYLLABUS OF ART

Class X

Art Activity

- Monochromatic colour scheme.
- Bichromatic colour scheme.
- Multichromatic colour scheme.
- Still life (perspective)
- Landscape (Linear and Ariel perspective)

- Poster on ill-effects of tobacco.
- Illustrations.
- Poster on save environment.
- Colouring in cartoon composition.
- Calligraphy.
- Diwali scene.
- Compositions.
- Free hand design.
- Poster on water conservation and save electricity.

Craft Activity

- Tie & dye.
- Greetings.
- Flower making.
- POP Murals.
- Best out of waste.
- Foil art.
- Collage Making.
- Paper Bags.