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

1. Background

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

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

2. Objectives:

Objectives of the course are to enable learners to:

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

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

3. Language Items

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

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

4. Methods and Techniques

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

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

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

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

Section A
Reading Skills

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

1. Discursive passage of 400-450 words. **10 marks**

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

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

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

Section B
Writing Skills and Grammar

II. Grammar **10 Marks**

- Determiners
- Tenses
- Modals
- Subject – verb concord
- Reported speech
    - Commands and requests
    - Statements
    - Questions

3. The courses at the secondary level seek to cement high professional grasp of grammatical items and levels of accuracy. Accurate use of spelling, punctuation and grammar will be assessed through Gap Filling/ Editing/Transformation exercises. Ten out of twelve questions will be attempted.

III. Writing Skills **10 marks**

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

5. Writing a Story (on a given cue/title)/Diary Entry, in 100-120 words. One out of two questions is to be answered**.** **5 marks**

Section C

Language through Literature 40 Marks

IV. Reference to the Context 5+5 = 10 Marks

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

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

V. Short & Long Answer Questions

a. Four out of Five Short Answer Type Questions to be answered in 40-50 words from the book BEEHIVE to assess interpretation, analysis, inference and evaluation. **4x3=12 marks**

b. Two out of Three Short Answer Type Questions to be answered in 40-50 words from the book MOMENTS to assess interpretation, analysis, inference and evaluation. **3x2=6 marks**

c. One out of two Long Answer Type Questions from BEEHIVE to be answered in about 100-120 words to assess creativity, imagination and extrapolation beyond the text and across the text. This can also be a passage-based question taken from a situation/plot from the text. **6 marks**

d. One out of two Long Answer Type Questions from MOMENTS, on theme or plot involving interpretation, extrapolation beyond the text and inference or character sketch to be answered in about 100-120 words. **6 marks**

Prescribed Books: Published by NCERT, New Delhi

1.BEEHIVE

Prose

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

Poems

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

2. **MOMENTS**

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

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

NOTE: Teachers are suggested to:

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

(ii) reduce teacher-talk time and keep it to the minimum,

(iii) take up questions for discussion to encourage pupils to participate and to express their ideas and defend their views.

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

INTERNAL ASSESSMENT

Listening and Speaking

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

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

Art-integrated projects based on activities like Role Play, Skit, Dramatization etc. must be used. Please refer to the Circular no. Acad-33/2020 dated 14th May 2020 at the http://cbseacademic.nic.in/web_material/Circulars/2020/33_Circular_2020.pdf for details.

Guidelines for the Assessment of Listening and Speaking Skills are given at Annexure I.

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

Marks-80

Sections	Competencies	Total marks
Reading Comprehension	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	20
Writing Skills and Grammar	Creative expression of an opinion, reasoning, justifying, illustrating, appropriate style and tone, using appropriate format and fluency. Applying conventions, using integrated structures with accuracy and fluency	20
Language through Literature	Recalling, reasoning, appreciating, applying literary conventions, illustrating and justifying. Extract relevant information, identifying the central theme and sub-theme, understanding the writers' message and writing fluently.	40
Total		**80**

For the details of Internal Assessment of 20 marks, please refer to thecircular no. Acad-11/2019, dated March 06, 2019.

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

SECTION - WISE WEIGHTAGE

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

Section A
Reading Skills

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

1. Discursive passage of 400-450 words. **10 marks**

2. Case-based factual passage (with visual input- statistical data, chart etc.) of 200-250 words. **10 marks**

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

Multiple Choice Questions / Objective Type Questions, and Short Answer Questions (to be answered in 30-40 words) will be asked to assess comprehension, interpretation, analysis, inference, evaluation and vocabulary.

Section B
Writing Skills and Grammar

II Grammar **10 Marks**

- Determiners
- Tenses
- Modals
- Subject – verb concord
- Reported speech
  - Commands and requests
  - Statements
  - Questions

3. The courses at the secondary level seek to cement high professional grasp of grammatical items and levels of accuracy. Accurate use of spelling, punctuation and grammar in context willbe assessed through Gap Filling/ Editing/Transformation exercises. Ten out of 12 questions will have to be attempted.

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

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

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

Section C **40 Marks**

Language through Literature

IV. Reference to the Context **5+5=10 Marks**

6. One extract out of two from Drama / Prose.

7. One extract out of two from poetry.

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

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

8. Four out of Five Short Answer Type Questions to be answered in 40-50 words from the bookFIRST FLIGHT to assess interpretation, analysis, inference and evaluation. **4x3=12 marks**

9. Two out of Three Short Answer Type Questions to be answered in 40-50 words each from FOOTPRINTS WITHOUT FEET to assess interpretation, analysis, inference and evaluation. **2x3=6 marks**

10. One out of two Long Answer Type Questions from FIRST FLIGHT to be answered in about100-120 words each to assess creativity, imagination and extrapolation beyond the text andacross the text. This can be a passage-based question taken from a situation/plot from the text. **6 marks**

11. One out of two Long Answer Type Questions from FOOTPRINTS WITHOUT FEET, on theme or plot involving interpretation, extrapolation beyond the text and inference or character sketch to be answered in about 100-120 words. **6 marks**

Prescribed Books: Published by NCERT, New Delhi

1. FIRST FLIGHT

A. Prose

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

B. Poems

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

2. FOOTPRINTS WITHOUT FEET

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

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

Note: Teachers are suggested to:

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

(ii) reduce teacher-talking time and keep it to the minimum,

(iii) take up questions for discussion to encourage pupils to participate and to marshal their ideas and express and defend their views, and

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

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

INTERNAL ASSESSMENT

Listening and Speaking Competencies

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

It is recommended that listening and speaking skills should be regularly practiced.
Art-integrated projects based on activities like Role Play, Skit, Dramatization etc. must be used. Please refer to the Circular no. Acad-33/2020 dated 14th May 2020 at the http://cbseacademic.nic.in/web_material/Circulars/2020/33_Circular_2020.pdf for details

Guidelines for the Assessment of Listening and Speaking Skills are given at Annexure I.

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

Marks 80

Sections	Competencies	Total marks
Reading Comprehension	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	20
Writing Skills and Grammar	Creative expression of an opinion, reasoning, justifying, illustrating, appropriate style and tone, using appropriate format and fluency. Applying conventions, using integrated structures with accuracy and fluency	20
Language through Literature	Recalling, reasoning, appreciating, applying literary conventions illustrating and justifyingetc. Extract relevant information, identifying the central theme and sub-theme, understanding the writers' message and writing fluently.	40
Total		**80**

For the details of Internal Assessment of 20 marks, please refer to thecircular no. Acad-11/2019, dated March 06, 2019.

Annexure I

Guidelines for Assessment of Listening and Speaking Skills (ALS)

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

Assessment of Listening and Speaking Skills: (5 Marks)

i. **Activities:**

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

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

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

SUGGESTIVE RUBRIC

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

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

iii. **Schedule:**

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

PHYSICS

Subject Code – 042

Class XI-XII (2025-26)

Senior Secondary stage of school education is a stage of transition from general education to discipline-based focus on curriculum. The present updated syllabus keeps in view the rigor and depth of disciplinary approach as well as the comprehension level of learners. Due care has also been taken that the syllabus is comparable to the international standards. Salient features of the syllabus include:

- Emphasis on basic conceptual understanding of the content.
- Emphasis on use of SI units, symbols, nomenclature of physical quantities and formulations as per international standards.
- Providing logical sequencing of units of the subject matter and proper placement of concepts with their linkage for better learning.
- Reducing the curriculum load by eliminating overlapping of concepts/content within the discipline and other disciplines.
- Promotion of process-skills, problem-solving abilities and applications of Physics concepts.

Besides, the syllabus also attempts to

- Strengthen the concepts developed at the secondary stage to provide firm foundation for further learning in the subject.
- Expose the learners to different processes used in Physics-related industrial and technological applications.
- Develop process-skills and experimental, observational, manipulative, decision making and investigatory skills in the learners.
- Promote problem solving abilities and creative thinking in learners.
- Develop conceptual competence in the learners and make them realize and appreciate the interface of Physics with other disciplines.

PHYSICS (Code No. 042)

COURSE STRUCTURE

Class XI - 2025-26 (Theory)

Time: 3 hrs. **Max Marks: 70**

UNIT	CHAPTERS	MARKS
Unit–I	**Physical World and Measurement**	**23**
	Chapter–1: Units and Measurements	
Unit-II	**Kinematics**	
	Chapter–2: Motion in a Straight Line	
	Chapter–3: Motion in a Plane	
Unit–III	**Laws of Motion**	
	Chapter–4: Laws of Motion	
Unit–IV	**Work, Energy and Power**	**17**
	Chapter–5: Work, Energy and Power	
Unit–V	**Motion of System of Particles and Rigid Body**	
	Chapter–6: System of Particles and Rotational Motion	
Unit-VI	**Gravitation**	
	Chapter–7: Gravitation	
Unit–VII	**Properties of Bulk Matter**	**20**
	Chapter–8: Mechanical Properties of Solids	
	Chapter–9: Mechanical Properties of Fluids	
	Chapter–10: Thermal Properties of Matter	
Unit–VIII	**Thermodynamics**	
	Chapter–11: Thermodynamics	
Unit–IX	**Behaviour of Perfect Gases and Kinetic Theory of Gases**	
	Chapter–12: Kinetic Theory	
Unit–X	**Oscillations and Waves**	**10**
	Chapter–13: Oscillations	
	Chapter–14: Waves	
Total		**70**

Unit I: Physical World and Measurements

Chapter–1: Units and Measurements

Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. significant figures, Determining the uncertainty in result**.** Dimensions of physical quantities, dimensional analysis and its applications.

Unit II: Kinematics

Chapter–2: Motion in a Straight Line

Frame of reference, Motion in a straight line, Elementary concepts of differentiation and integration for describing motion, uniform and non- uniform motion, average speed and average velocity and instantaneous velocity, uniformly accelerated motion, velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical and calculus treatment).

Chapter–3: Motion in a Plane

Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors, Unit vector; resolution of a vector in a plane, rectangular components, Scalar and Vector product of vectors.

Motion in a plane, cases of uniform velocity and uniform acceleration- projectile motion, uniform circular motion.

Unit III: Laws of Motion

Chapter–4: Laws of Motion

Intuitive concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion.

Law of conservation of linear momentum and its applications.

Equilibrium of concurrent forces, Static and kinetic friction, laws of friction, rolling friction, lubrication.

Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on a level circular road, vehicle on a banked road).

Unit IV: Work, Energy and Power

Chapter– 5: Work, Energy and Power

Work done by a constant force and a variable force; kinetic energy, work- energy theorem, power.

Notion of potential energy, potential energy of a spring, conservative forces: non-conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.

Unit V: Motion of System of Particles and Rigid Body

Chapter–6: System of Particles and Rotational Motion

Centre of mass of a two-particle system, momentum conservation and Centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications.

Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions.

Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation).

Unit VI: Gravitation

Chapter – 7: Gravitation

Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth.

Gravitational potential energy and gravitational potential, escape speed, orbital velocity of a satellite, energy of an orbiting satellite.

Unit VII: Properties of Bulk Matter

Chapter–8: Mechanical Properties of Solids

Elasticity, Stress-strain relationship, Hooke's law, Young’s modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), Poisson's ratio; elastic energy. Application of elastic behavior of materials (qualitative idea only).

Chapter–9: Mechanical Properties of Fluids

Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), effect of gravity on fluid pressure.

Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its simple applications (Torricelli's law and Dynamic lift).

Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise.

Chapter–10: Thermal Properties of Matter

Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; Cp, Cv - calorimetry; change of state - latent heat capacity.

Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law.

Unit VIII: Thermodynamics

Chapter–11: Thermodynamics

Thermal equilibrium and definition of temperature, zeroth law of thermodynamics, heat, work and internal energy. First law of thermodynamics, Second law of thermodynamics: Thermodynamic state variable and equation of state. Change of condition of gaseous state - isothermal, adiabatic, reversible, irreversible, and cyclic processes.

Unit IX: Behavior of Perfect Gases and Kinetic Theory of Gases

Chapter–12: Kinetic Theory

Equation of state of a perfect gas, work done in compressing a gas.

Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom, law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number.

Unit X: Oscillations and Waves

Chapter–13: Oscillations

Periodic motion - time period, frequency, displacement as a function of time, periodic functions and their applications.

Simple harmonic motion (S.H.M), uniform circular motion and its equations of motion; phase; oscillations of a loaded spring- restoring force and force constant; energy in S.H.M.
Kinetic and potential energies; simple pendulum derivation of expression for its time period.

Chapter–14: Waves

Wave motion: Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats.

PRACTICALS

The record, to be submitted by the students, at the time of their annual examination, has to include:

- Record of at least 8 Experiments [with 4 from each section], to be performed by the students.
- Record of at least 6 Activities [with 3 each from section A and section B], to be performed by the students.
- Report of the project carried out by the students.

EVALUATION SCHEME

Time 3 hours **Max. Marks: 30**

Topic	Marks
Two experiments one from each section	7+7
Practical record (experiment and activities)	5
One activity from any section	3
Investigatory Project	3
Viva on experiments, activities and project	5
Total	**30**

SECTION–A

Experiments

1. To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume.
2. To measure diameter of a given wire and thickness of a given sheet using screw gauge.
3. To determine volume of an irregular lamina using screw gauge.
4. To determine radius of curvature of a given spherical surface by a spherometer.
5. To determine the mass of two different objects using a beam balance.
6. To find the weight of a given body using parallelogram law of vectors.

7. Using a simple pendulum, plot its graph and use it to find the effective length of second's pendulum.
8. To study variation of time period of a simple pendulum of a given length by taking bobs of same size but different masses and interpret the result.
9. To study the relationship between force of limiting friction and normal reaction and to find the co- efficient of friction between a block and a horizontal surface.
10. To find the downward force, along an inclined plane, acting on a roller due to gravitational pull of the earth and study its relationship with the angle of inclination θ by plotting graph between force and Sinθ.

Activities

1. To make a paper scale of given least count, e.g., 0.2cm, 0.5 cm.
2. To determine mass of a given body using a metre scale by principle of moments.
3. To plot a graph for a given set of data, with proper choice of scales and error bars.
4. To measure the force of limiting friction for rolling of a roller on a horizontal plane.
5. To study the variation in range of a projectile with angle of projection.
6. To study the conservation of energy of a ball rolling down on an inclined plane (using a double inclined plane).
7. To study dissipation of energy of a simple pendulum by plotting a graph between square of amplitude and time.

SECTION–B

Experiments

1. To determine Young's modulus of elasticity of the material of a given wire.
2. To find the force constant of a helical spring by plotting a graph between load and extension.
3. To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P and V, and between P and 1/V.
4. To determine the surface tension of water by capillary rise method.
5. To determine the coefficient of viscosity of a given viscous liquid by measuring terminal velocity of a given spherical body.
6. To study the relationship between the temperature of a hot body and time by plotting a cooling curve.
7. To determine specific heat capacity of a given solid by method of mixtures.
8. To study the relation between frequency and length of a given wire under constant tension using sonometer.
9. To study the relation between the length of a given wire and tension for constant frequency using sonometer.
10. To find the speed of sound in air at room temperature using a resonance tube by two resonance positions.

Activities

1. To observe change of state and plot a cooling curve for molten wax.
2. To observe and explain the effect of heating on a bi-metallic strip.
3. To note the change in level of liquid in a container on heating and interpret the observations.
4. To study the effect of detergent on surface tension of water by observing capillary rise.
5. To study the factors affecting the rate of loss of heat of a liquid.
6. To study the effect of load on depression of a suitably clamped metre scale loaded at (i) its end (ii) in the middle.
7. To observe the decrease in pressure with increase in velocity of a fluid.

Practical Examination for Visually Impaired Students Class XI

Note: Same Evaluation scheme and general guidelines for visually impaired students as given for Class XII may be followed.

A. Items for Identification/Familiarity of the apparatus for assessment in practical's (All experiments)

Spherical ball, Cylindrical objects, vernier calipers, beaker, calorimeter, Screw gauge, wire, Beam balance, spring balance, weight box, gram and milligram weights, forceps, Parallelogram law of vectors apparatus, pulleys and pans used in the same 'weights' used, Bob and string used in a simple pendulum, meter scale, split cork, suspension arrangement, stop clock/stop watch, Helical spring, suspension arrangement used, weights, arrangement used for measuring extension, Sonometer, Wedges, pan and pulley used in it, 'weights' Tuning Fork, Meter scale, Beam balance, Weight box, gram and milligram weights, forceps, Resonance Tube, Tuning Fork, Meter scale, Flask/Beaker used for adding water.

B. List of Practicals

1. To measure diameter of a small spherical/cylindrical body using vernier calipers.
2. To measure the internal diameter and depth of a given beaker/calorimeter using vernier calipers and hence find its volume.
3. To measure diameter of given wire using screw gauge.
4. To measure thickness of a given sheet using screw gauge.
5. To determine the mass of a given object using a beam balance.
6. To find the weight of given body using the parallelogram law of vectors.
7. Using a simple pendulum plot L-T and graphs. Hence find the effective length of second's pendulum using appropriate length values.
8. To find the force constant of given helical spring by plotting a graph between load and extension.
9. (i) To study the relation between frequency and length of a given wire under constant tension using a sonometer.

   (ii) To study the relation between the length of a given wire and tension, for constant frequency, using a sonometer.
10. To find the speed of sound in air, at room temperature, using a resonance tube, by observing the two resonance positions.

Note: The above practicals may be carried out in an experiential manner rather than recording observations.

Prescribed Books:

1. Physics Part-I, Textbook for Class XI, Published by NCERT
2. Physics Part-II, Textbook for Class XI, Published by NCERT
3. Laboratory Manual of Physics, Class XI Published by NCERT
4. The list of other related books and manuals brought out by NCERT (consider multimedia also).

Note:

The content indicated in NCERT textbooks as excluded for the year 2025-26 is not to be tested by schools.

CLASS XII (2025-26)

PHYSICS (THEORY)

Time: 3 hrs. **Max Marks: 70**

UNIT	CHAPTERS	MARKS
Unit–I	**Electrostatics**	
	Chapter–1: Electric Charges and Fields	
	Chapter–2: Electrostatic Potential and Capacitance	**16**
Unit-II	**Current Electricity**	
	Chapter–3: Current Electricity	
Unit-III	**Magnetic Effects of Current and Magnetism**	
	Chapter–4: Moving Charges and Magnetism	
	Chapter–5: Magnetism and Matter	**17**
Unit-IV	**Electromagnetic Induction and Alternating Currents**	
	Chapter–6: Electromagnetic Induction	
	Chapter–7: Alternating Current	
Unit–V	**Electromagnetic Waves**	
	Chapter–8: Electromagnetic Waves	
Unit–VI	**Optics**	**18**
	Chapter–9: Ray Optics and Optical Instruments	
	Chapter–10: Wave Optics	
Unit–VII	**Dual Nature of Radiation and Matter**	
	Chapter–11: Dual Nature of Radiation and Matter	
Unit–VIII	**Atoms and Nuclei**	**12**
	Chapter–12: Atoms	
	Chapter–13: Nuclei	
Unit–IX	**Electronic Devices**	
	Chapter–14: Semiconductor Electronics: Materials, Devices and Simple Circuits	**7**
Total		**70**

Unit I: Electrostatics

Chapter–1: Electric Charges and Fields

Electric charges, Conservation of charge, Coulomb's law-force between two- point charges, forces between multiple charges; superposition principle and continuous charge distribution.

Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field.

Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).

Chapter–2: Electrostatic Potential and Capacitance

Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two-point charges and of electric dipole in an electrostatic field.

Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarization, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor (no derivation, formulae only).

Unit II: Current Electricity

Chapter–3: Current Electricity

Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity, temperature dependence of resistance, Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel, Kirchhoff's rules, Wheatstone bridge.

Unit III: Magnetic Effects of Current and Magnetism

Chapter–4: Moving Charges and Magnetism

Concept of magnetic field, Oersted's experiment.

Biot - Savart law and its application to current carrying circular loop.

Ampere's law and its applications to infinitely long straight wire. Straight solenoid (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields.

Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer- its current sensitivity and conversion to ammeter and voltmeter.

Chapter–5: Magnetism and Matter

Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines.

Magnetic properties of materials- Para-, dia- and ferro – magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties.

Unit IV: Electromagnetic Induction and Alternating Currents

Chapter–6: Electromagnetic Induction

Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction.

Chapter–7: Alternating Current

Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance, power in AC circuits, power factor, wattless current. AC generator, Transformer.

Unit V: Electromagnetic waves

Chapter–8: Electromagnetic Waves

Basic idea of displacement current, Electromagnetic waves, their characteristics, their transverse nature (qualitative idea only).

Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses.

Unit VI: Optics

Chapter–9: Ray Optics and Optical Instruments

Ray Optics: Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism.

Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.

Chapter–10: Wave Optics

Wave optics: Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width (No derivation final expression only), coherent sources and sustained interference of light, diffraction due to a single slit, width of central maxima (qualitative treatment only).

Unit VII: Dual Nature of Radiation and Matter

Chapter–11: Dual Nature of Radiation and Matter

Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light.
Experimental study of photoelectric effect
Matter waves-wave nature of particles, de-Broglie relation.

Unit VIII: Atoms and Nuclei

Chapter–12: Atoms

Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model of hydrogen atom, Expression for radius of nth possible orbit, velocity and energy of electron in nth orbit, hydrogen line spectra (qualitative treatment only).

Chapter–13: Nuclei

Composition and size of nucleus, nuclear force

Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.

Unit IX: Electronic Devices

Chapter–14: Semiconductor Electronics: Materials, Devices and Simple Circuits

Energy bands in conductors, semiconductors and insulators (qualitative ideas only) Intrinsic and extrinsic semiconductors- p and n type, p-n junction

Semiconductor diode - I-V characteristics in forward and reverse bias, application of junction diode -diode as a rectifier.

PRACTICALS

The record to be submitted by the students at the time of their annual examination has to include:

- Record of at least 8 Experiments [with 4 from each section], to be performed by the students.
- Record of at least 6 Activities [with 3 each from section A and section B], to be performed by the students.
- The Report of the project carried out by the students.

Evaluation Scheme

Max. Marks: 30 **Time 3 hours**

Two experiments one from each section	7+7 Marks
Practical record [experiments and activities]	5 Marks
One activity from any section	3 Marks
Investigatory Project	3 Marks
Viva on experiments, activities and project	5 Marks
Total	**30 marks**

Experiments **SECTION–A**

1. To determine resistivity of two / three wires by plotting a graph for potential difference versus current.
2. To find resistance of a given wire / standard resistor using metre bridge.
3. To verify the laws of combination (series) of resistances using a metre bridge.

OR

To verify the laws of combination (parallel) of resistances using a metre bridge.

4. To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.
5. To convert the given galvanometer (of known resistance and figure of merit) into a voltmeter of desired range and to verify the same.

OR

To convert the given galvanometer (of known resistance and figure of merit) into an ammeter of desired range and to verify the same.

6. To find the frequency of AC mains with a sonometer.

Activities

1. To measure the resistance and impedance of an inductor with or without iron core.
2. To measure resistance, voltage (AC/DC), current (AC) and check continuity of a given circuit using multimeter.
3. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.
4. To assemble the components of a given electrical circuit.
5. To study the variation in potential drop with length of a wire for a steady current.
6. To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.

SECTION-B

Experiments

1. To find the value of *v* for different values of *u* in case of a concave mirror and to find the focal length.
2. To find the focal length of a convex mirror, using a convex lens.
3. To find the focal length of a convex lens by plotting graphs between *u* and *v* or between *1/u* and *1/v*.
4. To find the focal length of a concave lens, using a convex lens.
5. To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation.
6. To determine refractive index of a glass slab using a travelling microscope.
7. To find the refractive index of a liquid using convex lens and plane mirror.
8. To find the refractive index of a liquid using a concave mirror and a plane mirror.
9. To draw the I-V characteristic curve for a p-n junction diode in forward and reverse bias.

Activities

1. To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items.
2. Use of multimeter to see the unidirectional flow of current in case of a diode and an LED and check whether a given electronic component (e.g., diode) is in working order.

3. To study effect of intensity of light (by varying distance of the source) on an LDR.
4. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.
5. To observe diffraction of light due to a thin slit.
6. To study the nature and size of the image formed by a (i) convex lens, or (ii) concave mirror, on a screen by using a candle and a screen (for different distances of the candle from the lens/mirror).
7. To obtain a lens combination with the specified focal length by using two lenses from the given set of lenses.

Suggested Investigatory Projects

1. To study various factors on which the internal resistance/EMF of a cell depends.
2. To study the variations in current flowing in a circuit containing an LDR because of a variation in
   (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance).
   (b) the distance of an incandescent lamp (of fixed power) used to 'illuminate' the LDR.
3. To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equiconvex lens (made from a glass of known refractive index) and an adjustable object needle.
4. To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer.
5. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.
6. To estimate the charge induced on each one of the two identical Styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law.
7. To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/(bulb) in a circuit fed up by an A.C. source of adjustable frequency.
8. To study the earth's magnetic field using a compass needle -bar magnet by plotting magnetic field lines and tangent galvanometer.

Practical Examination for Visually Impaired Students of
Classes XI and XII Evaluation Scheme

Time 2 hours **Max. Marks: 30**

Identification/Familiarity with the apparatus	5 marks
Written test (based on given/prescribed practicals)	10 marks
Practical Record	5 marks
Viva	10 marks
Total	**30 marks**

General Guidelines

- The practical examination will be of two-hour duration.
- A separate list of ten experiments is included here.
- The written examination in practicals for these students will be conducted at the time of practical examination of all other students.
- The written test will be of 30 minutes duration.
- The question paper given to the students should be legibly typed. It should contain a total of 15 practical skill based very short answer type questions. A student would be required to answer any 10 questions.
- A writer may be allowed to such students as per CBSE examination rules.
- All questions included in the question papers should be related to the listed practicals.
- Every question should require about two minutes to be answered.
- These students are also required to maintain a practical file. A student is expected to record at least five of the listed experiments as per the specific instructions for each subject. These practicals should be duly checked and signed by the internal examiner.
- The format of writing any experiment in the practical file should include aim, apparatus required, simple theory, procedure, related practical skills, precautions etc.
- Questions may be generated jointly by the external/internal examiners and used for assessment.
- The viva questions may include questions based on basic theory/principle/concept, apparatus/ materials/chemicals required, procedure, precautions, sources of error etc.

Class XII

A. Items for Identification/ familiarity with the apparatus for assessment in practicals (All experiments)

Meter scale, general shape of the voltmeter/ammeter, battery/power supply, connecting wires, standard resistances, connecting wires, voltmeter/ammeter, meter bridge, screw gauge, jockey Galvanometer, Resistance Box, standard Resistance, connecting wires, Potentiometer, jockey, Galvanometer, Lechlanche cell, Daniell cell [simple distinction between the two vis-à-vis their outer (glass and copper) containers], rheostat connecting wires, Galvanometer, resistance box, Plug-in and tapping keys, connecting wires battery/power supply, Diode, Resistor (Wire-wound or carbon ones with two wires connected to two ends), capacitors (one or two types), Inductors, Simple electric/electronic bell, battery/power supply, Plug- in and tapping keys, Convex lens, concave lens, convex mirror, concave mirror, Core/hollow wooden cylinder, insulated wire, ferromagnetic rod, Transformer core, insulated wire.

B. List of Practicals

1. To determine the resistance per cm of a given wire by plotting a graph between voltage and current.
2. To verify the laws of combination (series/parallel combination) of resistances by Ohm's law.
3. To find the resistance of a given wire / standard resistor using a meter bridge.
4. To determine the resistance of a galvanometer by half deflection method.
5. To identify a resistor, capacitor, inductor and diode from a mixed collection of such items.
6. To observe the difference between
   (i) a convex lens and a concave lens
   (ii) a convex mirror and a concave mirror and to estimate the likely difference between the power of two given convex /concave lenses.
7. To design an inductor coil and to know the effect of
   (i) change in the number of turns
   (ii) Introduction of ferromagnetic material as its core material on the inductance of the coil.
8. To design a (i) step up (ii) step down transformer on a given core and know the relation between its input and output voltages.

Note: The above practicals may be carried out in an experiential manner rather than recording observations.

Prescribed Books:

1. Physics, Class XI, Part -I and II, Published by NCERT.
2. Physics, Class XII, Part -I and II, Published by NCERT.
3. Laboratory Manual of Physics for class XII Published by NCERT.
4. The list of other related books and manuals brought out by NCERT (consider multimedia also).

Note:

The content indicated in NCERT textbooks as excluded for the year 2025-26 is not to be tested by schools and will not be assessed in the Board examinations 2025-26.

QUESTION PAPER DESIGN

Theory (Class: XI/XII)

Maximum Marks: 70 **Duration: 3 hrs.**

S No.	Typology of Questions	Total Marks	Approximate Percentage
1	**Remembering**: Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers. **Understanding**: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	27	38 %
2	**Applying**: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	22	32%
3	**Analysing :** Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations **Evaluating:** Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. **Creating**: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.	21	30%
	Total Marks	**70**	**100**
	Practical	**30**	
	Gross Total	**100**	

Note:

*The above template is only a sample. Suitable internal variations may be made for generating similar templates keeping the overall weightage to different form of questions and typology of questions same**.***

For more details kindly refer to Sample Question Paper of class XII for the year 2025-26 to be published by CBSE at its website.

INFORMATICS PRACTICES
Subject Code - 065
Class XI (2025-26)

1. **Prerequisite.** None

2**. Learning Outcomes**

At the end of this course, students will be able to:

- Identify the components of computer system.
- Create Python programs using different data types, lists and dictionaries.
- Understand database concepts and Relational Database Management Systems.
- Retrieve and manipulate data in RDBMS using Structured Query Language
- Identify the Emerging trends in the fields of Information Technology.

3. Distribution of Marks and Periods

Unit No	Unit Name	Marks
1	Introduction to computer system	10
2	Introduction to Python	25
3	Database concepts and the Structured Query Language	30
4	Introduction to Emerging Trends	5
	Practical	30
	Total	**100**

4. Unit Wise syllabus

Unit 1: Introduction to Computer System

Introduction to computer and computing: evolution of computing devices, components of a computer system and their interconnections, Input/output devices.

Computer Memory: Units of memory, types of memory – primary and secondary, data deletion, its recovery and related security concerns.

Software: purpose and types – system and application software, generic and specific purpose software.

Unit 2: Introduction to Python

Basics of Python programming, execution modes: - interactive and script mode, the structure of a program, indentation, identifiers, keywords, constants, variables, types of operator, precedence of operators, data types, mutable and immutable data types, statements, expression evaluation, comments, input and output statements, data type conversion, debugging.
Control Statements: if-else, if-elif-else, while loop, for loop
Lists: list operations - creating, initializing, traversing and manipulating lists, list methods and built-in functions – len(),list(),append(),insert(), count(),index(),remove(), pop(), reverse(), sort(), min(),max(),sum()
Dictionary: concept of key-value pair, creating, initializing, traversing, updating and deleting elements, dictionary methods and built-in functions – dict(), len(), keys(), values(), items(), update(), del(), clear()
Introduction to NumPy: Introduction, Creation of NumPy Arrays from List

Unit 3: Database concepts and the Structured Query Language

Database Concepts: Introduction to database concepts and its need, Database Management System.
Relational data model: Concept of domain, tuple, relation, candidate key, primary key, alternate key
Advantages of using Structured Query Language, Data Definition Language, Data Query Language and Data Manipulation Language, Introduction to MySQL, creating a database using MySQL, Data Types
Data Definition: CREATE DATABASE, CREATE TABLE, DROP, ALTER
Data Query: SELECT, FROM, WHERE with relational operators, BETWEEN, logical operators, IS NULL, IS NOT NULL
Data Manipulation: INSERT, DELETE,UPDATE

Unit 4: Introduction to the Emerging Trends

Artificial Intelligence, Machine Learning, Natural Language Processing, Immersive experience (AR, VR), Robotics, Big data and its characteristics, Internet of Things (IoT), Sensors, Smart cities, Cloud Computing and Cloud Services (SaaS, IaaS, PaaS); Grid Computing, Block chain technology.

Practical Marks Distribution

S.No.	Unit Name	Marks
1	Problem solving using Python programming language	11
2	Creating database using MySQL and performing Queries	7
3	Practical file (minimum of 14 python programs, and 14 SQL queries)	7
4	Viva-Voce	5
	Total	**30**

5. Suggested Practical List

5.1 Programming in Python

1. To find average and grade for given marks.
2. To find sale price of an item with given cost and discount (%).
3. To calculate perimeter/circumference and area of shapes such as triangle, rectangle, square and circle.
4. To calculate Simple and Compound interest.
5. To calculate profit-loss for given Cost and Sell Price.
6. To calculate EMI for Amount, Period and Interest.
7. To calculate tax - GST / Income Tax.
8. To find the largest and smallest numbers in a list.
9. To find the third largest/smallest number in a list.
10. To find the sum of squares of the first 100 natural numbers.
11. To print the first 'n' multiples of given number.
12. To count the number of vowels in user entered string.
13. To print the words starting with an alphabet in a user entered string.
14. To print number of occurrences of a given alphabet in each string.
15. Create a dictionary to store names of states and their capitals.
16. Create a dictionary of students to store names and marks obtained in 5 subjects.
17. To print the highest and lowest values in the dictionary.

5.2 Data Management: SQL Commands

1. To create a database

2. To create student table with the student id, class, section, gender, name, dob, and marks as attributes where the student id is the primary key.

3. To insert the details of at least 10 students in the above table.
4. To display the entire content of table.
5. To display Rno, Name and Marks of those students who are scoring marks more than 50.
6. To display Rno, Name, DOB of those students who are born between ‘2005- 01-01’ and ‘2005-12-31’.

Suggested material

NCERT Informatics Practices - Text book for class - XI (ISBN- 978-93-5292-148-5)

INFORMATICS PRACTICES
Subject Code - 065
Class XII (2025-26)

1. **Prerequisite:** Informatics Practices – Class XI

2. **Learning Outcomes**

   At the end of this course, students will be able to:

   - Create Series, Data frames and apply various operations.
   - Visualize data using relevant graphs.
   - Design SQL queries using aggregate functions.
   - Import/Export data between SQL database and Pandas.
   - Learn terminology related to networking and internet.
   - Identify internet security issues and configure browser settings.
   - Understand the impact of technology on society including gender and disability issues

3. **Distribution of Marks and Periods**

Unit No	**Unit Name**	**Marks**
1	Data Handling using Pandas and Data Visualization	25
2	Database Query using SQL	25
3	Introduction to Computer Networks	10
4	Societal Impacts	10
	Project	-
	Practical	30
	Total	**100**

4. Unit Wise syllabus

Unit 1: Data Handling using Pandas -I

Introduction to Python libraries- Pandas, Matplotlib;

Data structures in Pandas - Series and Data Frames.

Series: Creation of Series from – ndarray, dictionary, scalar value; mathematical operations; Head() and Tail() functions; Selection, Indexing and Slicing.

Data Frames: creation- from dictionary of Series, list of dictionaries, Text/CSV files, display; iteration; Operations on rows and columns: add, select, delete, rename; Head and Tail functions; Indexing using Labels, Boolean Indexing;

Importing/Exporting Data between CSV files and Data Frames.

Data Visualization

Purpose of plotting; drawing and saving following types of plots using Matplotlib – line plot, bar graph, histogram

Customizing plots: adding label, title, and legend in plots.

Unit 2: Database Query using SQL

Revision of database concepts and SQL commands covered in class XI

Math functions: POWER (), ROUND (), MOD ().

Text functions: UCASE ()/UPPER (), LCASE ()/LOWER (), MID ()/SUBSTRING ()/SUBSTR (),

LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM ().

Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (),

DAYNAME ().

Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*).

Querying and manipulating data using Group by, Having, Order by.

Working with two tables using equi-join

Unit 3: Introduction to Computer Networks

Introduction to networks, Types of network: PAN, LAN, MAN, WAN.

Network Devices: modem, hub, switch, repeater, router, gateway

Network Topologies: Star, Bus, Tree, Mesh.

Introduction to Internet, URL, WWW, and its applications- Web, email, Chat, VoIP.

Website: Introduction, difference between a website and webpage, static vs dynamic web page, web server and hosting of a website.

Web Browsers: Introduction, commonly used browsers, browser settings, add-ons and plug-ins, cookies.

Unit 4: Societal Impacts

Digital footprint, net and communication etiquettes, data protection, intellectual property rights (IPR), plagiarism, licensing and copyright, free and open source software (FOSS), cybercrime and cyber laws, hacking, phishing, cyber bullying, overview of Indian IT Act.

E-waste: hazards and management.

Awareness about health concerns related to the usage of technology.

Project Work

The aim of the class project is to create tangible and useful IT application. The learner may identify a real-world problem by exploring the environment. e.g. Students can visit shops/business places, communities or other organizations in their localities and enquire about the functioning of the organization, and how data are generated, stored, and managed.

The learner can take data stored in csv or database file and analyze using Python libraries and generate appropriate charts to visualize.

Learners can use Python libraries of their choice to develop software for their school or any other social good.

Learners should be sensitized to avoid plagiarism and violation of copyright issues while working on projects. Teachers should take necessary measures for this. Any resources (data, image etc.) used in the project must be suitably referenced.

The project can be done individually or in groups of 2 to 3 students. The project should be started by students at least 6 months before the submission deadline.

Practical Marks Distribution

S. No.	Unit Name	Marks
1	Programs using Pandas and Matplotlib	8
2	SQL Queries	7

3	Practical file (minimum of 15 programs based on Pandas, 4 based on Matplotlib and 15 SQL queries must be included)	5
4	Project Work (using concepts learned in class XI and XII)	5
5	Viva-Voce	5
	TOTAL	**30**

5. Suggested Practical List

5.1 Data Handling

1. Create a panda's series from a dictionary of values and a ndarray
2. Given a Series, print all the elements that are above the 75th percentile.
3. Create a Data Frame quarterly sales where each row contains the item category, item name, and expenditure. Group the rows by the category and print the total expenditure per category.
4. Create a data frame for examination result and display row labels, column labels data types of each column and the dimensions
5. Filter out rows based on different criteria such as duplicate rows.
6. Importing and exporting data between pandas and CSV file

5.2 Visualization

1. Given the school result data, analyses the performance of the students on different parameters, e.g subject wise or class wise.
2. For the Data frames created above, analyze, and plot appropriate charts with title and legend.
3. Take data of your interest from an open source (e.g. data.gov.in), aggregate and summarize it. Then plot it using different plotting functions of the Matplotlib library.

5.3 Data Management

1. Create a student table with the student id, name, and marks as attributes where the student id is the primary key.
2. Insert the details of a new student in the above table.
3. Delete the details of a student in the above table.
4. Use the select command to get the details of the students with marks more than 80.
5. Find the min, max, sum, and average of the marks in a student marks table.
6. Find the total number of customers from each country in the table (customer ID, customer Name, country) using group by.
7. Write a SQL query to order the (student ID, marks) table in descending order of the marks.

COMPUTER SCIENCE
Subject Code - 083
Class XI (2025-26)

1. Learning Outcomes

Students should be able to:

a) develop basic computational thinking
b) explain and use data types
c) appreciate the notion of algorithms
d) develop a basic understanding of computer systems- architecture and operating system
e) explain cyber ethics, cyber safety, and cybercrime
f) understand the value of technology in societies along with consideration of gender and disability issues.

2. Distribution of Marks

Unit No.	Unit Name	Marks
1	Computer Systems and Organisation	10
2	Computational Thinking and Programming -1	45
3	Society, Law, and Ethics	15
	Total	**70**

3. Unit wise Syllabus

Unit 1: Computer Systems and Organisation

- Basic computer organisation: Introduction to Computer System, hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory (bit, byte, KB, MB, GB, TB, PB)
- Types of software: System software (Operating systems, system utilities, device drivers), programming tools and language translators (assembler, compiler, and interpreter), application software
- Operating System(OS): functions of the operating system, OS user interface
- Boolean logic: NOT, AND, OR, NAND, NOR, XOR, truth tables and De Morgan's laws, Logic circuits
- Number System: Binary, Octal, Decimal and Hexadecimal number system;

conversion between number systems
- Encoding Schemes: ASCII, ISCII, and Unicode (UTF8, UTF32)

Unit 2: Computational Thinking and Programming - I

- Introduction to Problem-solving: Steps for Problem-solving (Analyzing the problem, developing an algorithm, coding, testing, and debugging), representation of algorithms using flowchart and pseudocode, decomposition
- Familiarization with the basics of Python programming: Introduction to Python, Features of Python, executing a simple “hello world" program, execution modes: interactive mode and script mode, Python character set, Python tokens(keyword, identifier, literal, operator, punctuator), variables, concept of l-value and r-value, use of comments
- Knowledge of data types: Number(integer, floating point,complex), boolean, sequence(string, list, tuple), None, Mapping(dictionary), mutable and immutable data types.
- Operators: arithmetic operators, relational operators, logical operators, assignment operators, augmented assignment operators, identity operators (is, is not), membership operators (in not in)
- Expressions, statement, type conversion, and input/output: precedence of operators, expression, evaluation of an expression, type-conversion (explicit and implicit conversion), accepting data as input from the console and displaying output.
- Errors- syntax errors, logical errors, and run-time errors
- Flow of Control: introduction, use of indentation, sequential flow, conditional and iterative flow
- Conditional statements: if, if-else, if-elif-else, flowcharts, simple programs: e.g.: absolute value, sort 3 numbers and divisibility of a number.
- Iterative Statement: for loop, range(), while loop, flowcharts, break and continue statements, nested loops, suggested programs: generating pattern, summation of series, finding the factorial of a positive number, etc.
- Strings: introduction, string operations (concatenation, repetition, membership and slicing), traversing a string using loops, built-in functions/methods–len(), capitalize(), title(), lower(), upper(), count(), find(), index(), endswith(), startswith(), isalnum(), isalpha(), isdigit(), islower(), isupper(), isspace(),lstrip(), rstrip(), strip(), replace(), join(), partition(), split()
- Lists: introduction, indexing, list operations (concatenation, repetition, membership and slicing), traversing a list using loops, built-in functions/methods–len(), list(), append(), extend(), insert(), count(), index(), remove(), pop(), reverse(), sort(), sorted(), min(), max(), sum(); nested lists, suggested programs: finding the maximum, minimum, mean of numeric values stored in a list; linear search on list of numbers and counting the frequency of elements in a list.
- Tuples: introduction, indexing, tuple operations (concatenation, repetition, membership and slicing); built-in functions/methods — len(), tuple(), count(), index(), sorted(), min(), max(), sum(); tuple assignment, nested tuple; suggested programs: finding the minimum, maximum, mean of values stored in a tuple; linear

search on a tuple of numbers, counting the frequency of elements in a tuple.

- Dictionary: introduction, accessing items in a dictionary using keys, mutability of a dictionary (adding a new term, modifying an existing item), traversing a dictionary, built-in functions/methods — len(), dict(), keys(), values(), items(), get(), update(), del, clear(), fromkeys(), copy(), pop(), popitem(), setdefault(), max(), min(), sorted(); Suggested programs: count the number of times a character appears in a given string using a dictionary, create a dictionary with names of employees, their salary and access them.
- Introduction to Python modules: Importing module using 'import <module>' and using from statement, importing math module (pi, e, sqrt(), ceil(), floor(), pow(), fabs(), sin(), cos(), tan()); random module (random(), randint(), randrange()), statistics module (mean(), median(), mode()).

Unit 3: Society, Law and Ethics

- Digital Footprints
- Digital Society and Netizen: net etiquettes, communication etiquettes, social media etiquettes
- Data Protection: Intellectual property rights (copyright, patent, trademark), violation of IPR (plagiarism, copyright infringement, trademark infringement), open source software and licensing (Creative Commons, GPL and Apache)
- Cyber Crime: definition, hacking, eavesdropping, phishing and fraud emails, ransomware, cyber trolls, cyber bullying
- Cyber safety: safely browsing the web, identity protection, confidentiality
- Malware: viruses, trojans, adware
- E-waste management: proper disposal of used electronic gadgets.
- Information Technology Act (IT Act)
- Technology and society: Gender and disability issues while teaching and using computers

4. Practical

S.No.	Unit Name	Marks (Total=30)
1.	**Lab Test (12 marks)**	
	Python program (60% logic + 20% documentation + 20% code quality)	**12**
2.	**Report File + Viva (10 marks)**	
	Report file: Minimum 20 Python programs	**7**
	Viva voce	**3**
3.	Project (that uses most of the concepts that have been learnt)	**8**

5. Suggested Practical List

Python Programming

- Input a welcome message and display it.
- Input two numbers and display the larger / smaller number.
- Input three numbers and display the largest / smallest number.
- Generate the following patterns using nested loops:

Pattern-1	Pattern-2	Pattern-3
* ** *** **** *****	12345 1234 123 12 1	A AB ABC ABCD ABCDE

- Write a program to input the value of x and n and print the sum of the following series:
  - $1 + x + x^2 + x^3 + x^4 + \cdots x^n$
  - $1 - x + x^2 - x^3 + x^4 - \cdots x^n$
  - $x + \frac{x^2}{2} + \frac{x^3}{3} + \frac{x^4}{4} + \cdots \frac{x^n}{n}$
  - $x + \frac{x^2}{2!} + \frac{x^3}{3!} + \frac{x^4}{4!} + \cdots \frac{x^n}{n!}$
- Determine whether a number is a perfect number, an Armstrong number or a palindrome.
- Input a number and check if the number is a prime or composite number.
- Display the terms of a Fibonacci series.
- Compute the greatest common divisor and least common multiple of two integers.
- Count and display the number of vowels, consonants, uppercase, lowercase characters in string.
- Input a string and determine whether it is a palindrome or not; convert the case of characters in a string.
- Find the largest/smallest number in a list/tuple
- Input a list of numbers and swap elements at the even location with the elements at the odd location.
- Input a list/tuple of elements, search for a given element in the list/tuple.
- Create a dictionary with the roll number, name and marks of n students in a class and display the names of students who have marks above 75.

6. Suggested Reading Material

- NCERT Textbook for Computer Science (Class XI)
- Support Material on CBSE website

COMPUTER SCIENCE
Subject Code – 083
Class XII (2025-26)

1. Prerequisites

Computer Science- Class XI

2. Learning Outcomes

Student should be able to

a) apply the concept of function.

b) explain and use the concept of file handling.

c) use basic data structure: Stacks

d) explain basics of computer networks.

e) use Database concepts, SQL along with connectivity between Python and SQL.

3. Distribution of Marks:

Unit No.	Unit Name	Marks
1	Computational Thinking and Programming — 2	40
2	Computer Networks	10
3	Database Management	20
	Total	**70**

4. Unit wise Syllabus

Unit 1: Computational Thinking and Programming – 2

- Revision of Python topics covered in Class XI.
- Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)
- Exception Handling: Introduction, handling exceptions using try-except-finally blocks
- Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths

- Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file
- Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file
- CSV file: import csv module, open / close csv file, write into a csv file using writer(),writerow(),writerows() and read from a csv file using reader()
- Data Structure: Stack, operations on stack (push & pop), implementation of stack using list.

Unit 2: Computer Networks

- Evolution of networking: introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET)
- Data communication terminologies: concept of communication, components of data communication (sender,receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)
- Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves)
- Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card)
- Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree)
- Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP
- Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting

Unit 3: Database Management

- Database concepts: introduction to database concepts and its need
- Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key)
- Structured Query Language: introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause, joins: cartesian product on two tables, equi-join and natural join
- Interface of python with an SQL database: connecting SQL with Python, performing

insert, update, delete queries using cursor, display data by using connect(), cursor(), execute(), commit(), fetchone(), fetchall(), rowcount, creating database connectivity applications, use of %s format specifier or format() to perform queries

5. Practical

S.No	Unit Name	Marks (Total=30)
1	Lab Test: 1. Python program (60% logic + 20% documentation + 20% code quality)	8
	2. SQL queries (4 queries based on one or two tables)	4
2	Report file: • Minimum 15 Python programs. • SQL Queries – Minimum 5 sets using one table / two tables. • Minimum 4 programs based on Python — SQL connectivity	7
3	Project (using concepts learnt in Classes 11 and 12)	8
4	Viva voce	3

6. Suggested Practical List:

Python Programming

- Read a text file line by line and display each word separated by a #.
- Read a text file and display the number of vowels/consonants/uppercase/lowercase characters in the file.
- Remove all the lines that contain the character 'a' in a file and write it to another file.
- Create a binary file with name and roll number. Search for a given roll number and display the name, if not found display appropriate message.
- Create a binary file with roll number, name and marks. Input a roll number and update the marks.
- Write a random number generator that generates random numbers between 1 and 6 (simulates a dice).
- Write a Python program to implement a stack using list.
- Create a CSV file by entering user-id and password, read and search the password for given userid.

Database Management

- Create a student table and insert data. Implement the following SQL commands on the student table:
    - ALTER table to add new attributes / modify data type / drop attribute
    - UPDATE table to modify data
    - ORDER By to display data in ascending / descending order
    - DELETE to remove tuple(s)
    - GROUP BY and find the min, max, sum, count and average
- Similar exercise may be framed for other cases.
- Integrate SQL with Python by importing suitable module.

7. Suggested Reading Material

- NCERT Textbook for COMPUTER SCIENCE (Class XII)
- Support Materials on the CBSE website.

8. Project

The aim of the class project is to create something that is tangible and useful using Python file handling/ Python-SQL connectivity. This should be done in groups of two to three students and should be started by students at least 6 months before the submission deadline. The aim here is to find a real world problem that is worthwhile to solve.

Students are encouraged to visit local businesses and ask them about the problems that they are facing. For example, if a business is finding it hard to create invoices for filing GST claims, then students can do a project that takes the raw data (list of transactions), groups the transactions by category, accounts for the GST tax rates, and creates invoices in the appropriate format. Students can be extremely creative here. They can use a wide variety of Python libraries to create user friendly applications such as games, software for their school, software for their disabled fellow students, and mobile applications, of course to do some of these projects, some additional learning is required; this should be encouraged. Students should know how to teach themselves.

The students should be sensitized to avoid plagiarism and violations of copyright issues while working on projects. Teachers should take necessary measures for this.

BIOLOGY

Subject Code – 044

Classes XI - XII (2025-26)

The present curriculum provides the students with updated concepts along with an extended exposure to contemporary areas of the subject. The curriculum also aims at emphasizing the underlying principles that are common to animals, plants and microorganisms as well as highlighting the relationship of Biology with other areas of knowledge. The format allows a simple, clear, sequential flow of concepts. It links the discoveries and innovations in biology to everyday life such as environment, industry, health and agriculture. The Biology curriculum is expected to enable the students to:

- develop capacities for observation, experimentation, documentation, and familiarity with quantitative reasoning and multi-disciplinary approaches.
- engender sensitivity towards biological issues (environment, health) in their surroundings and be aware of how citizens can contribute to their local communities and to science.
- be aware of bioethical concerns that arise in biology today.
- understand the integration of different fields of biology and highlight the interconnections between these fields.
- be exposed to diverse careers in the life sciences.

This curriculum of Biology will help in achieving the following curricular goals and competencies delineated in the National Curriculum Framework for School Education 2023:

CG-3 Explores the structure and function of the living world at the cellular level	C-3.1 Explains the role of cellular components (nucleus, mitochondria, endoplasmic reticulum, vacuoles, chloroplast, cell wall), including the semi permeability of cell membrane in making cell the structural basis of living organisms and functional basis of life processes C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction C-3.3 Describes mechanisms of heredity (in terms of DNA, genes, chromosomes) and variation (as changes in the sequence of DNA)
CG-4 Explores interconnectedness between organisms and their	C-4.1 Applies the knowledge of cellular diversity in organisms along with the ecological role organisms play (autotrophic/ heterotrophic nutrition) to classify them into five-kingdoms

environment	C-4.2 Illustrates different levels of organisations of living organisms (from molecules to organisms) C-4.3 Analyses different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level C-4.4 Analyses patterns of inheritance of traits in terms of Mendel's laws and its consequences at a population level (using models and/or simulations) C-4.5 Analyses evidences of biological evolution demonstrating the consequences of the process of natural selection in terms of changes — in allele frequency in population, structure, and function of organisms
CG-5 Draws linkages between scientific knowledge and knowledge across other curricular areas	C-5.3 Applies scientific principles to explain phenomena in other subjects (sound pitch, octave, and amplitude in music; use of muscles in dance form and sports)
CG-6 Understands and appreciates the contribution of India through history and the present times to the overall field of Science, including the disciplines that constitute it	C-6.1 Knows and explains the significant contributions of India to all matters (concepts, explanations, methods) that are studied within the curriculum in an integrated manner
CG-7 Develops awareness of the most current discoveries, ideas, and frontiers in all areas of scientific knowledge in order to appreciate that Science is ever evolving, and that there are still many unanswered questions	C-7.1 States concepts that represent the most current understanding of the matter being studied — ranging from mere familiarity to conceptual understanding of the matter as appropriate to the developmental stage of the students C-7.2 States questions related to matters in the curriculum for which current scientific understanding is well-recognised to be inadequate
CG-8 Explores the nature of Science by doing Science	C-8.1 Develops accurate and appropriate models (including geometric, mathematical, graphical) to represent real-life events and phenomena using scientific principles and use these models to manipulate variables and predict results C-8.2 Designs and implements a plan for scientific inquiry (formulates hypotheses, makes predictions, identifies variables, accurately uses scientific instruments, represents data — primary and secondary — in multiple modes, draws inferences based on data and understanding of scientific concepts, theories, laws, and principles, communicates findings using scientific terminology)

It is expected that the students would get an exposure to various branches of Biology in the curriculum in a more contextual and systematic manner as they study its various units.

(NCFSE-2023)

Attainment of the competencies shall be done through transaction of the curriculum using appropriate pedagogy; these shall be assessed through an integrated evaluation scheme.

COURSE STRUCTURE
CLASS XI (2025-26)
(THEORY)

Time: 03 Hours **Max. Marks: 70**

Unit	Title	Marks
I	Diversity of Living Organisms	15
II	Structural Organization in Plants and Animals	10
III	Cell: Structure and Function	15
IV	Plant Physiology	12
V	Human Physiology	18
	Total	**70**

Unit-I Diversity of Living Organisms

Chapter-1: The Living World

Biodiversity; Need for classification; three domains of life; taxonomy and systematics; concept of species and taxonomical hierarchy; binomial nomenclature

Chapter-2: Biological Classification

Five kingdom classification; Salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroids.

Chapter-3: Plant Kingdom

Classification of plants into major groups; Salient and distinguishing features and a few examples of Algae, Bryophyta, Pteridophyta, Gymnospermae and Angiosperms.

Chapter-4: Animal Kingdom

Salient features and classification of animals, non-chordates up to phyla level and chordates upto class level (salient features and at a few examples of each category).

(No live animals or specimen should be displayed.)

Unit-II Structural Organization in Plants and Animals

Chapter-5: Morphology of Flowering Plants

Morphology of different parts of flowering plants: root, stem, leaf, inflorescence, flower, fruit and seed. Description of family Solanaceae

Chapter-6: Anatomy of Flowering Plants

Anatomy and functions of tissue systems in dicots and monocots.

Chapter-7: Structural Organisation in Animals

Morphology, Anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of frog.

Unit-III Cell: Structure and Function

Chapter-8: Cell-The Unit of Life

Cell theory and cell as the basic unit of life, structure of prokaryotic and eukaryotic cells; Plant cell and animal cell; cell envelope; cell membrane, cell wall; cell organelles - structure and function; endomembrane system, endoplasmic reticulum, golgi bodies, lysosomes, vacuoles, mitochondria, ribosomes, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus.

Chapter-9: Biomolecules

Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, and nucleic acids; Enzyme - types, properties, enzyme action. (Topics excluded: Nature of Bond Linking Monomers in a Polymer, Dynamic State of Body Constituents Concept of Metabolism, Metabolic Basis of Living, The Living State)

Chapter-10: Cell Cycle and Cell Division

Cell cycle, mitosis, meiosis and their significance

Unit-IV Plant Physiology

Chapter-11: Photosynthesis in Higher Plants

Photosynthesis as a means of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis.

Chapter-12: Respiration in Plants

Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient.

Chapter-13: Plant - Growth and Development

Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes

in a plant cell; plant growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA.

Unit-V Human Physiology

Chapter-14: Breathing and Exchange of Gases

Respiratory organs in animals (recall only); Respiratory system in humans; mechanism of breathing and its regulation in humans - exchange of gases, transport of gases and regulation of respiration, respiratory volume; disorders related to respiration - asthma, emphysema, occupational respiratory disorders.

Chapter-15: Body Fluids and Circulation

Composition of blood, blood groups, coagulation of blood; composition of lymph and its function; human circulatory system - Structure of human heart and blood vessels; cardiac cycle, cardiac output, ECG; double circulation; regulation of cardiac activity; disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure.

Chapter-16: Excretory Products and their Elimination

Modes of excretion - ammonotelism, ureotelism, uricotelism; human excretory system – structure and function; urine formation, osmoregulation; regulation of kidney function - renin - angiotensin, atrial natriuretic factor, ADH and diabetes insipidus; role of other organs in excretion; disorders - uremia, renal failure, renal calculi, nephritis; dialysis and artificial kidney, kidney transplant.

Chapter-17: Locomotion and Movement

Types of movement - ciliary, flagellar, muscular; skeletal muscle, contractile proteins and muscle contraction; skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.

Chapter-18: Neural Control and Coordination

Neuron and nerves; Nervous system in humans - central nervous system; peripheral nervous system and visceral nervous system; generation and conduction of nerve impulse

Chapter- 19: Chemical Coordination and Integration

Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads; mechanism of hormone action (elementary idea); role of hormones as messengers and regulators, hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's disease.

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

Digestion and Absorption (Please Refer to CBSE Reading Material)

Alimentary canal and digestive glands, role of digestive enzymes and gastrointestinal hormones; Peristalsis, digestion, absorption and assimilation of proteins, carbohydrates and fats; calorific values of proteins, carbohydrates and fats; egestion; nutritional and digestive disorders - PEM, indigestion, constipation, vomiting, jaundice, diarrhoea.

PRACTICALS

Time: 03 Hours **Max. Marks: 30**

<table>
<tr><th colspan="2">Evaluation Scheme</th><th>Marks</th></tr>
<tr><td colspan="2">One Major Experiment Part A (Experiment No- 1,3,7,8)</td><td>5 Marks</td></tr>
<tr><td colspan="2">One Minor Experiment Part A (Experiment No- 6,9,10,11,12,13)</td><td>4 Marks</td></tr>
<tr><td colspan="2">Slide Preparation Part A (Experiment No- 2,4,5)</td><td>5 Marks</td></tr>
<tr><td colspan="2">Spotting Part B</td><td>7 Marks</td></tr>
<tr><td>Practical Record + Viva Voce</td><td rowspan="2">(Credit to the student's work over the academic session may be given)</td><td>4 Marks</td></tr>
<tr><td>Project Record + Viva Voce</td><td>5 Marks</td></tr>
<tr><td colspan="2">Total</td><td>30 Marks</td></tr>
</table>

A: List of Experiments

1. Study and describe locally available common flowering plants, from family Solanaceae (Poaceae, Asteraceae or Brassicaceae can be substituted in case of particular geographical location) including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams), type of root (tap and adventitious); type of stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound).
2. Preparation and study of T.S. of dicot and monocot roots and stems (primary).
3. Study of osmosis by potato osmometer.
4. Study of plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or flashy scale leaves of onion bulb).
5. Study of distribution of stomata on the upper and lower surfaces of leaves.

6. Comparative study of the rates of transpiration in the upper and lower surfaces of leaves.
7. Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials.
8. Separation of plant pigments through paper chromatography.
9. Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.
10. Test for presence of urea in urine.
11. Test for presence of sugar in urine.
12. Test for presence of albumin in urine.
13. Test for presence of bile salts in urine.

B. Study and Observe the following (spotting):

1. Parts of a compound microscope.
2. Specimens/slides/models and identification with reasons - Bacteria, *Oscillatoria, Spirogyra, Rhizopus*, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.
3. Virtual specimens/slides/models and identifying features of - *Amoeba, Hydra,* liver fluke, *Ascaris*, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.
4. Mitosis in onion root tip cells and animal's cells (grasshopper) from permanent slides.
5. Types of inflorescence (cymose and racemose).
6. Human skeleton and different types of joints with the help of virtual images/models only.

Practical Examination for Visually Impaired Students Class XI

Note: The 'Evaluation schemes' and 'General Guidelines' for visually impaired students as given for Class XII may be followed.

A. Items for Identification/Familiarity with the apparatus /equipment /animal and plant material / chemicals for assessment in practicals (All experiments)

B. Equipment - compound microscope, test tube, petri dish, chromatography paper, chromatography chamber, beaker, scalpel

Chemical – alcohol

Models – Model of Human skeleton to show – Ball and socket joints of girdles and limbs, Rib cage, Honeycomb, Mollusc shell, Pigeon and Star fish, cockroach

Specimen/Fresh Material – mushroom, succulents such as *Aloe vera*/ kalenchoe, raisins, potatoes, seeds of monocot and dicot- maize and gram or any other plant, plants of Solanaceae - Brinjal, Petunia, any other

C. List of Practicals

1. Study locally available common flowering plants of the family – Solanaceae and identify type of stem (Herbaceous or Woody), type of leaves (Compound or Simple).
2. Study the parts of a compound microscope- eye piece and objective lens, mirror, stage, coarse and fine adjustment knobs.
3. Differentiate between monocot and dicot plants on the basis of venation patterns.
4. Study the following parts of human skeleton (Model): Ball and socket joints of thigh and shoulder
5. Rib cage
6. Study honeybee/butterfly, snail/sheik snail through shell, Starfish, Pigeon (through models).
7. Identify the given specimen of a fungus – mushroom, gymnosperm-pine cone.
8. Identify and relate the experimental set up with the aim of experiment: For Potato Osmometer/endosmosis in raisins.

Note: The above practicals may be carried out in an experiential manner rather than only recording observations.

Prescribed Books:

1. Biology Class-XI, Published by NCERT
2. Other related books and manuals brought out by NCERT (including multimedia).
3. Biology supplementary Material (Revised). Available on CBSE Website.
4. Reading Material Biology Class XI.

COURSE STRUCTURE

CLASS XII (2025 - 26)

(THEORY)

Time: 03 Hours **Max. Marks: 70**

Unit	Title	Marks
VI	Reproduction	**16**
VII	Genetics and Evolution	**20**
VIII	Biology and Human Welfare	**12**
IX	Biotechnology and its Applications	**12**
X	Ecology and Environment	**10**
	Total	**70**

Unit-VI Reproduction

Chapter-1: Sexual Reproduction in Flowering Plants

Flower structure; development of male and female gametophytes; pollination - types, agencies and examples; out breeding devices; pollen-pistil interaction; double fertilization; post fertilization events - development of endosperm and embryo, development of seed and formation of fruit; special modes- apomixis, parthenocarpy, polyembryony; Significance of seed dispersal and fruit formation.

Chapter-2: Human Reproduction

Male and female reproductive systems; microscopic anatomy of testis and ovary; gametogenesis -spermatogenesis and oogenesis; menstrual cycle; fertilisation, embryo development upto blastocyst formation, implantation; pregnancy and placenta formation (elementary idea); parturition (elementary idea); lactation (elementary idea).

Chapter-3: Reproductive Health

Need for reproductive health and prevention of Sexually Transmitted Diseases (STDs); birth control - need and methods, contraception and medical termination of pregnancy (MTP); amniocentesis; infertility and assisted reproductive technologies - IVF, ZIFT, GIFT (elementary idea for general awareness).

Unit-VII Genetics and Evolution

Chapter-4: Principles of Inheritance and Variation

Heredity and variation: Mendelian inheritance; deviations from Mendelism – incomplete dominance, co-dominance, multiple alleles and inheritance of blood groups, pleiotropy; elementary idea of polygenic inheritance; chromosome theory of inheritance; chromosomes and genes; Sex determination - in humans, birds and honey bee; linkage and crossing over; sex linked inheritance - haemophilia, colour blindness; Mendelian disorders in humans - thalassemia; chromosomal disorders in humans; Down's syndrome, Turner's and Klinefelter's syndromes.

Chapter-5: Molecular Basis of Inheritance

Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central Dogma; transcription, genetic code, translation; gene expression and regulation - lac operon; Genome, Human and rice genome projects; DNA fingerprinting.

Chapter-6: Evolution

Origin of life; biological evolution and evidences for biological evolution (paleontology, comparative anatomy, embryology and molecular evidences); Darwin's contribution, modern synthetic theory of evolution; mechanism of evolution - variation (mutation and recombination) and natural selection with examples, types of natural selection; Gene flow and genetic drift; Hardy- Weinberg's principle; adaptive radiation; human evolution.

Unit-VIII: Biology and Human Welfare

Chapter-7: Human Health and Diseases

Pathogens; parasites causing human diseases (malaria, dengue, chikungunya, filariasis, ascariasis, typhoid, pneumonia, common cold, amoebiasis, ring worm) and their control; Basic concepts of immunology - vaccines; cancer, HIV and AIDS; Adolescence - drug and alcohol abuse.

Chapter-8: Microbes in Human Welfare

Microbes in food processing, industrial production, sewage treatment, energy generation and microbes as bio-control agents and bio-fertilizers. Antibiotics; production and judicious use.

Unit-IX Biotechnology and its Applications

Chapter-9: Biotechnology - Principles and Processes

Genetic Engineering (Recombinant DNA Technology).

Chapter-10: Biotechnology and its Applications

Application of biotechnology in health and agriculture: Human insulin and vaccine production, stem cell technology, gene therapy; genetically modified organisms - Bt crops; transgenic animals; biosafety issues, biopiracy and patents.

Unit-X Ecology and Environment

Chapter-11: Organisms and Populations

Population interactions - mutualism, competition, predation, parasitism; population attributes - growth, birth rate and death rate, age distribution.

Chapter-12: Ecosystem

Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy.

Chapter-13: Biodiversity and its Conservation

Biodiversity-Concept, patterns, importance; loss of biodiversity; biodiversity conservation; hotspots, endangered organisms, extinction, Red Data Book, Sacred Groves, biosphere reserves, national parks, wildlife, sanctuaries and Ramsar sites.

PRACTICALS

Time allowed: 3 Hours **Max. Marks: 30**

<table>
<tr><th colspan="3">Evaluation Scheme</th><th>Marks</th></tr>
<tr><td colspan="2">One Major Experiment</td><td>5</td><td>5</td></tr>
<tr><td colspan="2">One Minor Experiment</td><td>2 & 3</td><td>4</td></tr>
<tr><td colspan="2">Slide Preparation</td><td>1 & 4</td><td>5</td></tr>
<tr><td colspan="3">Spotting</td><td>7</td></tr>
<tr><td>Practical Record + Viva Voce</td><td rowspan="2">(Credit to the student's work over the academic session may be given)</td><td></td><td>4</td></tr>
<tr><td>Investigatory Project and its Project Record + Viva Voce</td><td></td><td>5</td></tr>
<tr><td colspan="3">Total</td><td>30</td></tr>
</table>

A. List of Experiments

1. Prepare a temporary mount to observe pollen germination.
2. Study the plant population density by quadrat method.
3. Study the plant population frequency by quadrat method.
4. Prepare a temporary mount of onion root tip to study mitosis.
5. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, banana etc.

B. Study and observe the following (Spotting):

1. Flowers adapted to pollination by different agencies (wind, insects, birds).
2. Pollen germination on stigma through a permanent slide or scanning electron micrograph.
3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).
4. Meiosis in onion bud cell or grasshopper testis through permanent slides.
5. T.S. of blastula through permanent slides (Mammalian).
6. Mendelian inheritance using seeds of different colour/sizes of any plant.
7. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.
8. Controlled pollination - emasculation, tagging and bagging.
9. Common disease causing organisms like *Ascaris, Entamoeba, Plasmodium*, any fungus causing ringworm through permanent slides, models or virtual images or specimens. Comment on symptoms of diseases that they cause.
10. Models specimens showing symbiotic association in lichens, root nodules of leguminous plants, and parasitic mode of nutrition shown by Cuscuta on host.
11. Flash cards / models showing examples of homologous and analogous organs.

Practical Examination for Visually Impaired Students of Classes XI and XII

Evaluation Scheme

Time: 02 Hours **Max. Marks: 30**

Topic	Marks
Identification/Familiarity with the apparatus	5
Written test (Based on given / prescribed practicals)	10
Practical Records	5
Viva	10
Total	**30**

General Guidelines

- The practical examination will be of two-hour duration. A separate list of ten experiments is included here.
- The written examination in practicals for these students will be conducted at the time of practical examination of all other students.

- The written test will be of 30 minutes duration.
- The question paper given to the students should be legibly typed. It should contain a total of 15 practical skill based very short answer type questions. A student would be required to answer any 10 questions.
- A writer may be allowed to such students as per CBSE examination rules.
- All questions included in the question paper should be related to the listed practicals. Every question should require about two minutes to be answered.
- These students are also required to maintain a practical file. A student is expected to record at least five of the listed experiments as per the specific instructions for each subject. These practicals should be duly checked and signed by the internal examiner.
- The format of writing any experiment in the practical file should include aim, apparatus required, simple theory, procedure, related practical skills, precautions etc.
- Questions may be generated jointly by the external/internal examiners and used for assessment.
- The viva questions may include questions based on basic theory / principle / concept, apparatus / materials / chemicals required, procedure, precautions, sources of error etc.

Class XII

A. Items for Identification/ familiarity with the apparatus for assessment in practicals (All experiments) Beaker, flask, petriplates, soil from different sites - sandy, clayey, loamy, small potted plants, aluminium foil, paint brush, test tubes, starch solution, iodine, ice cubes, Bunsen burner/spirit lamp/water bath, large flowers, Maize inflorescence, model of developmental stages highlighting morula and blastula of frog, beads/seeds of different shapes/size/texture *Ascaris*, Cactus/*Opuntia* (model).

B. List of Practicals

1. Study of flowers adapted to pollination by different agencies (wind, insects).
2. Identification of T.S of morula or blastula of frog (Model).
3. Study of Mendelian inheritance pattern using beads/seeds of different sizes/texture.
4. Preparation of pedigree charts of genetic traits such as rolling of tongue, colour blindness.
5. Study of emasculation, tagging and bagging by trying out an exercise on controlled pollination.

6. Identify common disease causing organisms like *Ascaris* (model) and learn some common symptoms of the disease that they cause.
7. Comment upon the morphological adaptations of plants found in xerophytic conditions.

Note: The above practicals may be carried out in an experiential manner rather than recording observations.

Prescribed Books:

1. Biology, Class-XII, Published by NCERT.
2. Other related books and manuals brought out by NCERT (consider multimedia also).
3. Biology Supplementary Material (Revised). Available on CBSE website.

Question Paper Design (Theory)

Class XII (2025 -26)

Biology (044)

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

Note:

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

Suggestive verbs for various competencies

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

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

RATIONALE

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

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

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

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

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

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

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

AIMS & OBJECTIVE

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

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

   This can be enabled through:

   i. an understanding of continuity and change in human civilisation, its causation and effect, and its impact on modern life,

   ii. an understanding of the interaction between nature and human beings, the spatial patterns arising out of this interaction, and its effect on human life,

   iii. an awareness and understanding of the diversity of people and their practices in different societies, regions, and cultures within societies,

   iv. an awareness of various social, political, and economic institutions, their origin, functioning and transformations over time.

b. Develop an understanding and appreciation for the methods of enquiry relevant to Social Science and deepen students' skills to engage with the key questions and issues confronting society.

   These could be specifically seen as:

   i. Skills in sourcing evidence, interpreting them, confirming through multiple sources and evidence, and constructing a coherent narrative,

   ii. Skills in recognizing spatial patterns, map-reading, interpretation and analysis of various interconnected concepts and processes,

   iii. Skills of creative and analytical thinking to form informed opinions, demonstrate logical decision-making, and incline towards a problem- solving attitude,

   iv. Skills to collect, organize, analyse, represent, and present data and information on various historical, geographical, and socio-political issues,

   v. Skills to question unsubstantiated ideas, biases, stereotypes, and assumptions to foster scientific temper and propose meaningful responses to contemporary concerns of society.

c. Foster ethical, human, and Constitutional values:

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

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

CURRICULAR GOALS-CG

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

- CG -2 Analyse the important phases in world history and draw insight to understand the present-day world
- CG-3 Understand the idea of a nation and the emergence of the modern Indian Nation
- CG -4 Develops an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, cultural diversity, and biodiversity of the region
- CG -5 Understand the Indian Constitution and explores the essence of Indian democracy and the characteristics of a democratic government.
- CG -6 Understand and analyse social, cultural, and political life in India over time – as well as the underlying historical Indian ethos and philosophy of unity in diversity – and recognises challenges faced in these areas in the past and present and the efforts (being) made to address them
- CG -7 Develop an understanding of the inter-relationship between human beings and their physical environment and how that influences the livelihoods, cultural diversity, and biodiversity of the region
- CG -8 Evaluate the economic development of a country in terms of its impact on the lives of its people and nature
- CG-9 Understand and appreciate the contribution of India through history and present times, to the overall field of Social Science, and the disciplines that constitute it

COMPETENCIES

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

- C-2.1 Explain historical events and processes with different types of sources with specific examples from India and world history.
- C-2.3 Trace aspects of continuity and change in different phases of world history (including cultural trends, social and religious reforms, and economic and political transformations)
- C-2.4 Explain the growth of new ideas and practices across the world and how they affected the course of world history.
- C-2.5 Recognise the various practices that arose, such as those in C- 2.4, and came to be condemned later on (such as racism, slavery, colonial invasions, conquests, and plunder, genocides, exclusion of women from democratic and other institutions), all of which have also impacted the course of world history and have left unhealed wounds.
- C3.2 Identify and analyse important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and

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

- C-4.1 Locate physiographic regions of India and the climatic zones of the world on a globe/map.
- C-4.2 Explain important geographical concepts, characteristics of key landforms, their origin, and other physical factors of a region
- C-4.3 Draw inter- linkages between various components of the physical environment, such as climate and relief, climate and vegetation, vegetation, and wildlife.
- C-4.4 Analyse and evaluate the inter- relationship between the natural environment and human beings and their cultures across regions and, in the case of India, the special environmental ethos that resulted in practices of nature conservation
- C-4.5 Critically evaluate the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them
- C-4.6 Develop sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation
- C-5.1 Understand that the Indian Constitution draws from the great cultural heritage and common aspirations of the Indian nation, and recalls India's early experiments with democracy (assemblies in *Mahajanapadas*, kingdoms and empires at several levels of the society, guilds *sanghas* and *ganas*, village councils and committees, *Uthiramerur* inscriptions)
- C-5.2 Appreciate fundamental Constitutional values and identify their significance for the prosperity of the Indian nation.
- C-5.3 Explain that fundamental rights are the most basic human rights, and they flourish when people also perform their fundamental duties
- C-5.4 Analyse the basic features of a democracy and democratic government – and its history in India and across the world – and compares this form of government with other forms of government.
- C-5.5- Analyse the critical role of non-state and non-market participants in the functioning of a democratic government and society, such as the media, civil society, socio-religious institutions, and community institutions
- C-6.1 Understands how the Indian ethos and the cultural integration across India did not attempt uniformity, but respected and promoted a rich diversity in Indian society, and how this harmonisation and unity in diversity, with a historical respect for all cultures, women have counted among India's great strengths by promoting peaceful coexistence
- C-6.2 Understand that despite C-6.1, forms of inequality, injustice, and discrimination have occurred in different sections of society at different times (due to internal as well as outside forces such as colonisation), leading to political, social, and cultural efforts, struggles, movements, and mechanisms at various levels towards equity, inclusion, justice, and harmony, with varying outcomes and degrees of success.
- C-7.1 Defines key features of the economy, such as, production, distribution, demand, supply, trade, and commerce, and factors that influence these aspects (including technology)

- C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country's economy, especially India
- C-7.3 Distinguishes between 'unorganised' and 'organised' sectors of the economy and their role in production for the local market in small, medium, and large-scale production centres (industries), and recognises the special importance of the so-called 'unorganised' sector in Indian economy and its connections with the self-organising features of Indian society
- C-7.4 Trace the beginning and importance of large- scale trade and commerce (including e- commerce) between one country and another - the key items of trade in the beginning, and the changes from time to time.
- C-8.1 Gather, comprehend, and analyse data related to income, capital, poverty, and employment in one's locality, region and at the national level. Markets.
- C-8.3 Understand these features in the context of ancient India, with its thriving trade, both internal and external, and its well- established trade practices and networks, business conventions, and diverse industries, all of which made India one of the world's leading economies up to the colonial period
- C-8.4 Describes India's recent path towards again becoming one of the three largest economies of the world, and how individuals can contribute to this economic progress.
- C-8.5 Appreciates the connections between economic development and the environment, and the broader indicators of societal wellbeing beyond GDP growth and income.

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

CLASS IX (2025-26)
COURSE STRUCTURE

<table>
<tr><th colspan="3">History-India and the Contemporary World - I</th><th>Marks-20 inclusive of Map pointing</th></tr>
<tr><th>Section</th><th>Chapter No</th><th>Chapter Name</th><th>Marks</th></tr>
<tr><td rowspan="3">I
Events and Process</td><td>I</td><td>The French Revolution</td><td rowspan="3">18+2 map pointing</td></tr>
<tr><td>II</td><td>Socialism in Europe and the Russian Revolution</td></tr>
<tr><td>III</td><td>Nazism and the Rise of Hitler</td></tr>
<tr><td rowspan="2">II
Livelihood, Economies and Societies</td><td>IV</td><td>Forest, Society and Colonialism
Interdisciplinary project as part of multiple assessments
(Internally assessed for 5 marks)</td><td rowspan="2"></td></tr>
<tr><td>V</td><td>Pastoralists in the Modern World
(assessed as part of Periodic Assessment only)</td></tr>
</table>

Geography-Contemporary India - I		Marks-20 inclusive of Map pointing
Chapter No.	**Chapter Name**	**Marks**
1	India – Size and Location	**17+3 map pointing***
2	Physical Features of India	
3	Drainage	
4	Climate	
	Natural Vegetation and Wildlife **(Only map pointing to be evaluated in the annual examination**.	
5	Population	* Marks as mentioned
6	Interdisciplinary project as part of multiple assessments (Internally assessed for 5 marks)	

Political Science- Democratic Politics - I		20 Marks
Chapter No.	**Chapter name**	**Marks**
1	What is Democracy?	20
	Why Democracy?	
2	Constitutional Design	
3	Electoral Politics	
4	Working of Institutions	
5	Democratic Rights	
Economics		**20 Marks**
Chapter No.	**Chapter name**	**Marks**
1	The Story of Village Palampur **(To be assessed as part of Periodic Assessment only)**	20
2	People as Resource	
3	Poverty as a Challenge	
4	Food Security in India	

CLASS IX

History-India and the Contemporary World - I

Section I: Events and Processes

Chapter-1 The French Revolution

Learning Outcomes-The students will be able to

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

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

Chapter 2- Socialism in Europe and the Russian Revolution

Learning Outcomes- The students will be able to

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

Chapter 3-Nazism and the Rise of Hitler.

Learning Outcomes- The students will be able to

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

Section II: Livelihoods, Economies and Societies

Chapter 4- Forest Society and Colonialism

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

Learning Outcomes- Refer Annexure II

Chapter 5- Pastoralists in the Modern World

Learning Outcomes- The students will be able to

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

Geography- Contemporary India - I

Chapter 1- India – Size and Location

Learning Outcomes- The students will be able to

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

Chapter 2- Physical Features of India

Learning Outcomes- The students will be able to

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

Chapter 3- Drainage

Learning Outcomes- The students will be able to

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

Chapter 4- Climate

Learning Outcomes- The students will be able to

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

Chapter 5- Natural Vegetation and Wildlife

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

Learning Outcomes- -Refer annexure II

Chapter-6. Population

Learning Outcomes- The students will be able to

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

Political Science-Democratic Politics - I

Chapter 1- What is Democracy? Why Democracy?

Learning Outcomes- The students will be able to

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

- Compare and Contrast working of democracies of India and North Korea and infer on their differences and significance in each country.
- Analyse and infer on the different historical processes and forces that have contributed for the promotion of democracy

Chapter 2- Constitutional Design

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

Chapter 3- Electoral Politics

Learning Outcomes- The students will be able to

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

Chapter 4- Working of Institutions

Learning Outcomes- The students will be able to

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

Chapter 5- Democratic Rights

Learning Outcomes- The students will be able to

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

ECONOMICS

Chapter 1- The Story of Village Palampur

Learning Outcomes- The students will be able to

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

Chapter 2- People as Resource

Learning Outcomes- The students will be able to

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

Chapter 3- Poverty as a Challenge

Learning Outcomes- The students will be able to

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

Chapter 4- Food Security in India

Learning Outcomes- The students will be able to

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

CLASS IX (2025-26)
MAP WORK

Subject	Chapter	List of Areas to be located /labeled/identified on the map
History	French Revolution	Outline political map of France. Locate/label/ identify. ● Bordeaux, Nantes, Paris and Marseille
	Socialism in Europe and the Russian Revolution	Outline political map of the World. Locate/label/identify Major countries of First World War: Central Powers: Germany, Austria-Hungary, Turkey (Ottoman Empire). Allied Powers - France, England, Russia and USA
	Nazism and the Rise of Hitler	Outline Political Map of World. Locate/label/ identify Major countries of Second World War Axis: Powers – Germany, Italy, Japan Allied Powers – UK, France, Former USSR, USA
Geography	India : size and location	● India - States and Capitals ● Tropic of Cancer, Standard Meridian (Location and Labeling) ● Neighbouring Countries
	India physical features	● Mountain Ranges: The Karakoram, The Zanskar, The Shivalik, The Aravali, The Vindhya, The Satpura, Western and Eastern Ghats ● Mountain Peaks-K2, Kanchan Junga, Anai Mudi

		● Plateau - Deccan Plateau, Chota Nagpur Plateau, Malwa Plateau ● Coastal Plains – Konkan, Malabar, Coromandel & Northen Circar (Location and Labelling)
	Drainage system	Rivers (Identification only) ● The Himalayan River Systems - Indus, Ganges & Sutlej ● The Peninsular Rivers – The Narmada, The Tapti, The Kaveri, The Krishna, The Godavari, The Mahanadi ● Lakes - Wular, Pulicat, Sambar, Chilika
	Climate	● Annual rainfall in India, Monsoon wind direction
	Population	● Population density of all states ● The state having highest and lowest density of population

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

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

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

CLASS IX
PRESCRIBED TEXT BOOKS

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

CLASS X -2025-26
COURSE STRUCTURE

History (India and the Contemporary World-II)			**20 Marks inclusive of map pointing**
Section	**Chapter No.**	**Chapter name**	**Marks**
I Events and processes	I	The Rise of Nationalism in Europe	18+2 map pointing
	II	Nationalism in India	
II Livelihoods, Economies and Societies	III	The Making of a Global World (**To be evaluated in the Board Examination** Subtopics: 1 to 1.3 Pre Modern World to Conquest, disease and trade)	
		Interdisciplinary project as part of multiple assessments (Internally assessed for 5 marks) Subtopics 2 to 4.4 –The nineteenth century (1815-1914) to end of Bretton Woods & the beginning of "Globalisation"	
	IV	The Age of Industrialisation (**To be assessed as part of Periodic Assessment only**)	
III. Everyday Life, Culture and politics	V	Print Culture and the Modern world	

Geography (Contemporary India-II)		**Marks-20 inclusive map pointing**
Chapter No.	**Chapter Name**	**Marks**
1	Resources and Development	17+3 map pointing
2	Forest and Wildlife Resources	
3	Water resources	
4	Agriculture	
5	Minerals and Energy Resources	
6	Manufacturing Industries	
7	Lifelines of National Economy (Only map pointing to be evaluated in the Board Examination)	

	Interdisciplinary project as part of multiple assessments (Internally assessed for 5 marks)		
Political Science (Democratic Politics-II)			**20**
Unit No.	**Chapter No.**	**Chapter name**	**Marks**
I	1	Power-sharing	20
	2	Federalism	
II	3	Gender, Religion and Caste	
III	4	Political Parties	
IV	5	Outcomes of Democracy	
Economics (Understanding Economic Development)			**20**
Chapter No.	**Chapter name**		**Marks**
1	Development		20
2	Sectors of the Indian Economy		
3	Money and Credit		
4	• Globalisation and the Indian Economy to be evaluated in the Board Examination • What is Globalisation? • Factors that have enabled Globalisation		
	• Interdisciplinary project as part of multiple assessment (Internally assessed for 5 marks) • Production across the countries • Chinese toys in India • World Trade Organisation • The Struggle for a Fair Globalisation		
5	Consumer Rights (Project Work)		

CLASS X (2025-26)
COURSE CONTENT

HISTORY: India and the Contemporary World - II

Chapter I -The Rise of Nationalism in Europe

Learning outcome- The students will be able to

- Infer how French Revolution had an impact on the European countries in the making of a nation state.
- Comprehend the nature of the diverse social movements of the time.
- Analyse and infer the evolution of the idea of nationalism which led to the formation of nation states in Europe and elsewhere.
- Evaluate the reasons which led to the First World War.

Chapter 2 Nationalism in India

Learning outcome- The students will be able to

- Illustrate various facets of Nationalistic movements that ushered in the sense of Collective Belonging.
- Evaluate the effectiveness of the strategies applied by Gandhiji and other leaders in the movements organised by him.
- Summarise the effects of the First World War that triggered the two defining movements (Khilafat &Non- Cooperation Movement) in India

Chapter 3-. The Making of a Global World

Subtopic 1. The pre-modern world
Subtopic 2. 19th century 1815 -1914
Subtopic 3. The inter- war economy
Subtopic 4. Rebuilding of world economy: the post war era.

Inter disciplinary Project with chapter 7 of Geography: Lifelines of National Economy and chapter 4 of Economics: Globalisation and the Indian Economy

Refer Annexure III B

Learning outcome- The students will be able to

- Summarise the changes that transformed the world in different areas.
- Depict the global interconnectedness from the Pre-modern to the present day.
- Enumerate the destructive impact of colonialism on the livelihoods of colonised people.

Chapter 4-The Age of Industrialisation

Learning outcome- The students will be able to

- Enumerate economic, political, social features of Pre and Post Industrialization.
- Analyse and infer how the industrialization impacted colonies with specific focus on India

Chapter 5. Print culture and the Modern World

Learning Outcome- The students will be able to

- Enumerate the development of Print from its beginnings in East Asia to its expansion in Europe and India.
- Compare and contrast the old tradition of handwritten manuscripts versus print technology.
- Summarise the role of Print revolution and its impact

Geography: Contemporary India – II

Chapter 1- Resources and Development

Learning Outcome- The students will be able to

- Enumerates how the resources are interdependent, justify how planning is essential in judicious utilisation of resources and the need to develop them in India.
- Infer the rationale for development of resources.
- Analyse and evaluate data and information related to non-optimal land, utilization in India
- Suggest remedial measures for optimal utilization of underutilized resources

Chapter 2- Forest and Wildlife Resources

Learning Outcome- The students will be able to

- Examine the importance of conserving forests and wildlife and their interdependency in maintaining the ecology for the sustainable development of India.
- Analyse the role of grazing and wood cutting in the development and degradation
- Summarise the reasons for conservation of biodiversity under sustainable development.
- Discuss how developmental works, grazing wood cutting have impacted the forests
- Use art integration to summarise and present the reasons for conservation of biodiversity in India under sustainable development.

Chapter 3-Water Resources

Learning Outcome- The students will be able to

- Examine the reasons for conservation of water resource in India.
- Analyse and infer how the multipurpose projects are supporting the requirement of water.

Chapter 4- Agriculture

Learning Outcome

- Examine the crucial role played by agriculture in our economy and society.
- Analyse the challenges faced by the farming community in India.
- Identifies various aspects of agriculture, including crop production, types of farming etc.

Chapter 5- Minerals and Energy Resources

Learning Outcome- The students will be able to

- Differentiates between the conventional and nonconventional sources of energy.
- Analyses the importance of minerals and natural resources for economic development of the country. Suggests strategies for sustainable use of natural resources

Chapter 6-Manufacturing Industries

Learning Outcome- The students will be able to

- Enumerate the impact of manufacturing industries on the environment and develop strategies for sustainable development of the manufacturing sector.
- Differentiate between various types of manufacturing industries based on their input materials, processes, and end products, and analyse their significance in the Indian economy.
- Analyse the relation between the availability of raw material and location of the industry

Chapter 7- Life Lines of National Economy

Interdisciplinary project with chapter 3 of History: The making of a Global world and chapter 4 of Economics: Globalisation and the Indian Economy

Learning Outcome-Refer Annexure III-B

Political Science: Democratic Politics - II

Chapter 1- Power – sharing

Learning Outcome- The students will be able to

- Enumerate the need for power sharing in democracy.
- Analyse the challenges faced by countries like Belgium and Sri Lanka ensuring effective power sharing.
- Compare and contrast the power sharing of India with Sri Lanka and Belgium.
- Summarise the purpose of power sharing in preserving the unity and stability of a country

Chapter 2-Federalism

Learning Outcome- The students will be able to

- Infer how federalism is being practised in India.
- Analyse the policies and politics that has strengthened federalism in practice.

Chapter 3- Gender, Religion and Caste

Learning Outcome- The students will be able to

- Examine the role and differences of Gender, religion and Caste in practicing Democracy.
- Analyse that different expressions based on the differences, are healthy or not in a democracy

Chapter 4- Political Parties

Learning Outcome- The students will be able to

- Understand the process of parties getting elected.
- Know the significance of the right to vote and exercise the duties as citizens of a nation.
- Examine the role, purpose and no. of Political Parties in Democracy.

Chapter 5- Outcomes of Democracy

Learning Outcome- The students will be able to

- Enumerates how the success of democracy depends on quality of government, economic well- being, inequality, social differences, conflict, freedom and dignity.

Economics: Understanding Economic Development

Chapter- 1. Development

Learning Outcome- The students will be able to

- Enumerate and examine the different processes involved in setting developmental Goals.
- Analyse and infer how the per capita income depicts the economic condition of the nation.

- Evaluate the development goals with reference to their efficacy, implemental strategies, relevance to current requirements of the nation.
- Compare the per capita income of some countries and infer reasons for the variance.
- Analyse the multiple perspectives on the need of development.

Chapter 2- Sectors of the Indian Economy

Learning Outcome- The students will be able to

- Analyse and infer how the economic activities in different sectors contribute to the overall growth and development of the Indian economy.
- Propose solutions to identified problems in different sectors based on their understanding.
- Summarise how the organised and unorganised sectors are providing employment
- Enumerate the role of the unorganised sector in impacting Per Capita Income currently and propose suggestive steps to reduce the unorganised sector for more productive contributions to GDP.
- Enumerate and infer the essential role of the Public and Private sectors

Chapter 3- Money and Credit

Learning Outcome- The students will be able to

- Enumerate how money plays as a medium exchange in all transactions of goods and services from ancient times to the present times.
- Analyse and infer various sources of Credit.
- Summarise the significance and role of self-help groups in the betterment of the economic condition of rural people/ women.

Chapter- 4. Globalisation and the Indian Economy

Subtopics: What is Globalisation?
Factors that have enabled Globalisation**.**

Interdisciplinary Project with chapter 3 of History: "The making of a Global World". And chapter 7 of Geography: "Lifelines of National Economy"

Subtopics:

i. Production across the countries
ii. World Trade Organisation
iii. The Struggle for a Fair Globalisation

Refer Annexure III-B

Learning Outcome- The students will be able to

- Enumerate the concept of globalisation and its definition, evolution, and impact on the global economy.
- Evaluate the key role of the key major drivers of globalisation and their role in shaping the global economic landscape in various countries.
- Comprehend the significance of role of G20 and its significance in the light of India's role.

5. Project work - Consumer Rights **OR** Social Issues **OR** Sustainable Development

Learning Outcome- Refer Annexure III

CLASS X (2025-26)
MAP WORK

<table>
<tr><th>Subject</th><th>Name of the Chapter</th><th>List of areas to be located/ labeled/ identified on the map</th></tr>
<tr><td>History</td><td>Nationalism in India</td><td>I. Congress sessions:
1920 Calcutta
1920 Nagpur
1927 Madras session
II. 3 Satyagraha movements:
Kheda
Champaran
Ahmedabad mill workers
III. Jallianwala Bagh
IV. Dandi March</td></tr>
<tr><td>Geography</td><td>Resources and Development</td><td>Identify Major Soil Types</td></tr>
<tr><td rowspan="3"></td><td>Water Resources</td><td>Locating and Labeling:<table><tr><td>Salal
Bhakra Nangal
Tehri
Rana Pratap Sagar</td><td>Sardar Sarovar
Hirakund
Nagarjun Sagar
Tungabhadra</td></tr></table></td></tr>
<tr><td>Agriculture</td><td>Identify:
Major areas of Rice and Wheat
Largest/Major producer states of Sugarcane, Tea, Coffee,
Rubber, Cotton and Jute</td></tr>
<tr><td>Minerals and Energy Resources</td><td>Identify:<table><tr><td>Iron Ore Mines
Mayurbhanj
Durg
Bailadila
Bellary
Kudremukh</td><td>Coal Mines
Raniganj
Bokaro
Talcher
Neyveli</td><td>Oil Fields
Digboi
Naharkatia
Mumbai High
Bassien
Kalol
Ankaleshwar</td></tr></table></td></tr>
<tr><td></td><td></td><td>Locate and label: Power Plants<table><tr><td>Thermal
Namrup
Singrauli
Ramagundam</td><td>Nuclear
Narora
Kakrapara
Tarapur
Kalpakkam</td></tr></table></td></tr>
</table>

<table>
<tr>
<td></td>
<td>Manufacturing Industries</td>
<td>

Manufacturing Industries (Locating and labeling 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. Vijayanagar, f. Salem
Software technology Parks: a. Noida, b. Gandhi-nagar, c. Mumbai, d. Pune, e. Hyderabad, f. Bengaluru, g. Chennai,h. Thiruvananthapuram

</td>
</tr>
<tr>
<td></td>
<td>Lifelines of National Economy</td>
<td>
Locating and Labeling

a. Major Sea Ports
<table>
<tr>
<td>• Kandla
• Mumbai
• Marmagao
• New Mangalore
• Kochi</td>
<td>• Tuticorin
• Chennai
• Visakhapatnam
• Paradip
• Haldia</td>
</tr>
</table>
b. International Airports

Amritsar (Raja Sansi-Sri Guru Ram Das ji)
Delhi (Indira Gandhi)
Mumbai (Chhatrapati Shivaji)
Chennai (Meenambakkam)
Kolkata (Netaji Subhash Chandra Bose)
Hyderabad (Rajiv Gandhi)

</td>
</tr>
</table>

Note

1. Items of Locating and Labelling may also be given for Identification.
2. The Maps available in the website of Govt. of India may be used.

CLASS X
QUESTION PAPER DESIGN

Subject Wise Weightage

Subject	Syllabus	Marks (80)	Percentage
History	• The Rise of Nationalism in Europe. • Nationalism in India: • The Making of a Global World Sub topics 1 to 1.3 • Print Culture and the Modern World • Map pointing	18+2	25%
Political Science	• Power – sharing • Federalism • Gender, Religion and Caste • Political Parties • Outcomes of Democracy	20	25%
Geography	• Resources and Development • Forest and Wildlife Resources • Water Resources • Agriculture • Mineral& Energy resources • Manufacturing industries. • Lifelines of National Economy (map pointing) • Map pointing	17+3	25%
Economics	• Development • Sectors of the Indian Economy • Money and Credit • Globalisation and The Indian Economy Sub topics: ➢ What is Globalisation? ➢ Factors that have enabled Globalisation	20	25%

Weightage to Type of Questions

Type of Questions	Marks (80)	Percentage
1 Mark- MCQs (20x1) (Inclusive Of Assertion, Reason, Differentiation & Stem)	20	25%
2 Marks- Long Answer Questions (4x2) (Knowledge, Understanding, Application, Analysis, Evaluation, Synthesis & Create)	8	10%
3 Marks- Long Answer Questions (5x3) (Knowledge, Understanding, Application, Analysis, Evaluation, Synthesis & Create)	15	18.75%
4 Marks- Case Study Questions (3x4) (Knowledge, Understanding, Application, Analysis, Evaluation, Synthesis & Create)	12	15%
5 Mark- Long Answer Questions (4x5) (Knowledge, Understanding, Application, Analysis, Evaluation, Synthesis & Create)	20	25%
Map Pointing	5	6.25%

Weightage to Competency Levels

Sr. No.	Competencies	Marks (80)	Percent-age
1	**Remembering and Understanding**: Exhibiting memory of previously learned material by recalling facts, terms, basic concepts, and answers; Demonstrating understanding of facts and ideas by organizing, translating, interpreting, giving descriptions and stating main ideas.	24	30%
2	**Applying**: Solving problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	11	13.25%
3	**Analysing, Evaluating and Creating**: Examining and breaking information into parts by identifying motives or causes; Making inferences and finding evidence to support generalizations; Presenting and defending opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. Compiling information together in a different way by combining elements in a new pattern or proposing alternative solutions.	40	50%
4	Map Skill	5	6.25%
	Total	**80**	**100%**

CLASS X (2025-26)

GUIDELINES FOR INTERNAL ASSESSMENT: 20 MARKS

Type of Assessment	Description	Marks
Periodic Assessment	Pen Paper Test.	**5**
Multiple Assessment	Quiz, debate, role play, viva, group discussion, visual expression, interactive bulletin boards, gallery walks, exit cards, concept maps, peer assessment, Self-assessment etc. through Interdisciplinary project	**5**
Subject Enrichment Activity	Project Work on Consumer Rights OR Social Issues OR Sustainable Development (Interdisciplinary)	**5**
Portfolio	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	**5**

CLASS X
PRESCRIBED TEXTBOOKS

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

Project Work: Class IX

Project work	Competencies
Every student must undertake one project on Disaster Management **Objectives:** The main objectives of giving project work on Disaster Management to the students are to: • To create awareness in them about different disasters, their consequences and management • To prepare them in advance to face such situations • To ensure their participation in disaster risk reduction plans • To enable them to create awareness and preparedness among the community. • The project work helps in enhancing the Life Skills of the students. • Various forms of art must be integrated in the project work.	The students will develop the following competencies: • Collaboration • Use analytical skills. • Evaluate the situations during disasters. • Synthesize the information. • Find creative solutions. • Strategies the order of solutions. • Use the right communication skills.

Guidelines:

To realise the expected objectives, it would be required of the principals / teachers to muster support from various local authorities and organisations 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 Defence etc. in the area where the schools are located.

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

The distribution of marks over different rubrics relating to Project Work is as follows:

S.no	Aspects	Marks
a	Content accuracy and originality	2
b	Competencies exhibited and Presentation	2
c	Viva-Voce	1

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

- 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.
- The Project Report can be handwritten or digital.
- The Project Work needs to enhance cognitive, affective and psychomotor skills of the learners. It will include self-assessment and peer assessment, and progress of the child in project-based and inquiry-based learning, art integrated activities, experiments, models, quizzes, role plays, group work, portfolios, etc., along with teacher assessment. (NEP-2020)
- The Project work can culminate in the form of PowerPoint Presentation/Exhibition/Skit/albums/files/song and dance or culture show /story telling/debate/panel discussion, paper presentation and whichever is suitable to Visually Impaired Candidates.)
- The record of the project work (internal assessment) should be kept for a period of three months for verification, if any.

Class-IX

Interdisciplinary Project

Subject and Chapter No	Name of the Chapter	Suggested Teaching Learning Process	Learning Outcomes with Specific Competencies	Time Schedule For Completion
History Chapter IV	Forest Society and Colonialism	Interdisciplinary project Teachers can make use of the pedagogies in facilitating the students in completion of Interdisciplinary Project Constructivism Inquiry based learning Cooperative Learning Research based learning. Experiential learning. Art integration **Multiple Assessment:** Ex. Surveys / Interviews / Research work/ Observation/ Story based Presentation/ Art integration/ Quiz/ Debate/ role play/ viva, /group discussion, /visual expression/ interactive bulletin boards/ gallery walks/ exit cards/ concept maps/ peer assessment/ art integration /Self-assessment/ integration of technology etc.	Compare the forest situations prevailed in the pre- colonial, colonial and post-colonial era. Evaluate the growth &role of commercial forestry in different types of Vegetation. Analyse the reasons for rebellions in forest areas of south East-Asia with specification to JAVA. To defend the role of government and the local communities in protecting the forest cover.	The schools to do IDP between the months of April and September at the School under the guidance of a teacher. (Carryover of project to home must be strictly avoided)
Geography Chapter 5	Natural Vegetation and Wildlife		To devise ways to protect the forest vegetation and wildlife in India.	

Guidelines for Interdisciplinary Project:

It involves combining 2 or more disciplines into one activity-more coherent and integrated. The generally recognized disciplines are economics, History, Geography, Political Science. A sample plan has been enclosed. Kindly access the link given below- https://docs.google.com/document/d/1668TKkRt80r4-kbjJ_Y7zg4mF3Vq1Y9k/edit

Plan of the project:

A suggestive 10 days' plan given below which you may follow, or you can create on your own, based on the templates provided below.

Process:

Initial collaboration among students to arrange their roles, areas of integration, area of investigation and analysis, roles of students.

Team leader: Main collaborator
Team members:
Note: Teacher to allocate the roles as per the abilities of the students.

- Final submission based on course deliverables as given in the template below the 10-day plan.
- Assessment Plan: to be done by the teacher clearly mentioning the Rubrics.
- Report, poster and video acknowledgements: reflections & expression of gratitude as given in the template given below

Class IX Interdisciplinary project

10 days suggestive plan **10 periods**

Day 1-2: Colonialism and Forest Society

Discuss the impact of colonialism on forest societies and explore the concept of forest as a resource in colonialism. Group project: Research and present a PPT on the colonial forest policy and its impact on forest societies.

Day 3-4: "Rebellion in the Forest"

Analyse the causes and effects of forest-based rebellions in history. Watch the following film Group discuss about forest tribes of your state and the exploitations they face. Refer Annexure V for Rubrics. https://www.youtube.com/watch?v=N6SR0REa_YA

Day 5-6: **Forest Transformations in Java, Tropical Evergreen Forests**

- Examine the impact of human activity on forests in Java.
- Explore how changes in land use, agriculture, and industry have impacted the forests. Students can research the history of forest transformations in Java and their impact on the environment.
- Study the transformation of forests in Java, from pre-colonial to post-colonial times. Compare and contrast the conversion of forest into agricultural land and the need. Through group discussions find solutions. Present an art integrated project.
- Discuss the characteristics of tropical evergreen forests, including their climate, soil, and flora/fauna.
- Students can research specific examples of tropical evergreen forests and the challenges they face, such as deforestation and climate change.

Group project: watch the video through the link https://www.youtube.com/watch?v=Ml0xvHsBigI

- Analyse and present the impact of forest transformations on society, economy and environment in Java. Compare and contrast it with India.
- Present a PPT of your learnings. Refer Annexure V for rubrics

Day 7-8: Discuss how colonialism has affected the forest's biodiversity and the survival of indigenous communities living in and around the forest

Group activity: Divide the group into smaller teams and assign them tasks related to identifying the impact of colonialism on different types of forests. For example, one team can research the impact of colonialism on forest fires, while another team can research the impact of colonialism on the survival of indigenous plants and animals. Make the students use cartoon strips to present their findings. Day 9-10: Make the students compile all the findings of 8 days' work and present them in PPT and through the template given in Annexure IV.

Annexure III-A

Class X - Project **10 periods**	**5 marks**
Every student must undertake one project on … **Consumer Awareness** OR **Social Issues** OR **Sustainable Development** **Objectives:** • The 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 an 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 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.	The students will develop the following competencies: • Collaboration • Use analytical skills. • Evaluate the situations during disasters. • Synthesize the information. • Find creative solutions. • Strategies the order of solutions • Use right communication skills

Guidelines:

The distribution of marks over different rubrics relating to Project Work is as follows:

S.no	Rubrics	Marks
a	Content accuracy and originality	2
b	Competencies exhibited and Presentation	2
c	Viva-Voce	1

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

1. All documents pertaining to assessment under this activity should be meticulously maintained by the schools.
2. 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.
3. 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.
4. The Project Report can be handwritten or digital.
5. The Project Work needs to enhance cognitive, affective and psychomotor skills of the learners. It will include self-assessment and peer assessment, and progress of the child in project-based and inquiry-based learning, art integrated activities, experiments, models, quizzes, role plays, group work, portfolios, etc., along with teacher assessment. (NEP- 2020)

6. Must be done at school only as specific periods are allocated for project work.

7. The Project work can culminate in the form of Power Point Presentation/ Exhibition/ Skit/ albums/files/song and dance or culture show/story telling/debate/panel discussion, paper presentation and whichever is suitable to Visually Impaired Candidates.

8. 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 the Board. Subjudice cases, if any or those involving RTI / Grievances may however be retained beyond three months.

B

Interdisciplinary Project: Class X

Subject and Chapter No.	Name of the Chapter	Suggested Teaching Learning Process	Learning Outcomes with Specific Competencies	Time Schedule For Completion
History Chapter III Geography Chapter 7	Making of a Global World Lifelines of National Economy	The teachers may use the following pedagogies in facilitating the students in completion of Interdisciplinary Project. 1) Constructivism 2) Inquiry based learning 3) Cooperative learning 4) Learning station 5) Collaborative learning 6) Videos/ Visuals/ documentaries/ movie clippings 7) Carousel technique 8) Art integrated learning Group Discussions Multiple Assessment:Ex. Surveys/ Interviews/ Research work/ Observation/ Story based	➢ Analyse the implication of globalisation for local economies. ➢ Discuss how globalisation is experienced differently by different social groups. Enumerates how transportation works as a lifeline of the economy. ➢ Analyse and infer the impact of roadways and railways on the national economy. ➢ Analyses and infers the challenges faced by the roadways and railway sector in India	The schools do IDP between the months of April and September at the School under the guidance of a teacher. (Carryover of project to home must be strictly avoided)
Economics Chapter 4	Globalisation on and the Indian Economy	Presentation/ Art integration/ Quiz/ Debate/ role play/ viva, /group discussion, /visual expression/ interactive bulletin	➢ Integrate various dimensions of globalisation in terms of cultural / political/ social /economical aspects)	

		boards/ gallery walks/ exit cards/ concept maps/ peer assessment/ art integration /Self - assessment/integration of technology etc.	➢ Appraise the evolution of Globalisation and the global trends ➢ Investigate the factors that facilitated the growth on MNC 's	

Guidelines:

- It involves combining 2 or more disciplines into one activity-more coherent and integrated. The generally recognized disciplines are economics, History, Geography, Political Science, a sample plan has been enclosed) Kindly access the link given below
- Methodology (A sample interdisciplinary project plan Link has been provided to get an insight about IDP.
- Topic: The Making of a Global World, Globalisation and Lifelines of Economy

  https://docs.google.com/document/d/1dIwwFeaSrExJHMtkzcEuoq3ehh-7FtHM/edit

Plan of the project:
A suggestive 10 days' plan given below which you may follow, or you can create on your own, based on the templates provided below

Process:
Initial collaboration among students to arrange their roles, areas of integration, area of investigation and analysis, roles of students

Class X: 10-day Suggestive plan for Interdisciplinary Project
Day 1: Introduction to the Interdisciplinary Project and Setting the Context:
Brief overview of the project and its objectives to be given by the teachers. History teacher to Introduce the historical context of World War II and its aftermath through inquiry methods. Make the students to Group discuss the impact of World War II on the global economy. Teacher to refer annexure III for rubrics) **Day 2: The Great Depression:** Students to watch a video from the link, https://www.youtube.com/watch?v=62DxELjuRec and https://www.youtube.com/watch?v=gqx2E5qIV9s and discuss the causes and consequences of the Great Depression and the role of mass production and consumption in the Great Depression. Present a group PPT /report on consequences of the Great Depression on the global economy. **Day 3: India and the Great Depression:** Students to collect material related to India's economic condition during the Great Depression and relate it to the present economic condition of India and US. Students may collect information through a visit to the library. As a group activity they need to present a collage of their findings. (Refer Annexure V for

Rubrics)

Day 4: Rebuilding the World Economy and Interlinking Production across countries

- Teachers to use Jigsaw method to make the students to sit in groups and to give each group a part of the handout with information about process taken to rebuild economy and how the production across countries got interlinked. Make the groups to compile the information by moving from group to group.
- Make them discuss the post-war recovery efforts and their impact on the global economy
- Study the role of the Bretton Woods Institutions in rebuilding the world economy and present their learnings through Art Integrated Project. Refer Annexure V for rubrics.

Day 5: The Early Post-War Years: The role of roadways, railways, waterways and airways in building the national economy

- The teacher distributes the Handout 1 given below to the groups and asks them to find answers to the questions posed at the end of Hand out and present it in groups using Café conversations mode. Refer Annexure III for rubrics.
- Study the challenges faced by the world in the early post-war years

Day 6: Post war settlement and Bretton Woods institutions

- Make the students read the material available online/in library and debate the impact of Bretton Woods institutions in the post war economy. Refer Annexure V for Rubrics.

Day 7: Decolonization and Independence - The Role of World Trade Organization:

- The students will read the handout 2 given below and present a role play of the support rendered by the World Trade Organisation in building new nations. Refer Annexure V for rubrics
- Introduction to the World Trade Organization
- Study the role of the WTO in promoting fair trade practices
- Discuss the efforts made towards decolonization and independence of nations

Day 8: End of Bretton Woods and the Beginning of Globalisation:

- The students will read material given in the link https://www.imf.org/external/about/histend.htm#:~:text=End%20of%20Bretton%20Woods%20system,-The%20system%20dissolved&text=In%20August%201971%2C%20U.S.%20President,the%20breakdown%20of%20the%20system.
- Organise an interview with a financial expert/economist/ lecturer/professor. Based on the information they gathered, the students can submit a report on the findings.
- Discuss the reasons for the end of the Bretton Woods system

Day 9: Impact of Globalization in India and role of waterways and airways https://www.jagranjosh.com/general-knowledge/new-economic-policy-of-1991-objectives-features-and-impacts-1448348633-1

- The students will read the material given in the above link and design a report on what would have happened to India if this stand wasn't taken and present it as a radio talk show. They will link the role of waterways and airways in the achievement of India in globalisation.
- Study the impact of globalisation on the Indian economy
- Discuss the challenges faced by India in the process of globalisation

Day 10. Final presentation

Conclude the interdisciplinary project and summarize the key takeaways.

Handout 1 for Day 4 of Inter Disciplinary Project of Class X

Title: The Role of Waterways and Airways in Post-World War II- World and India

Introduction: After the end of World War II, the world faced significant economic, social, and political changes. The role of waterways and airways in shaping the post-war world and India is crucial to understand. In this handout, we will discuss the impact of waterways and airways on the global economy and how it helped India in its development.

Waterways: In the post-World War II era, waterways played a crucial role in the movement of goods and people. The improvement of ports and waterways allowed for more efficient transportation of goods and helped to spur economic growth.

The increased demand for goods and services, combined with the development of shipping technologies, allowed for the expansion of international trade. This helped to boost the world economy and allowed for the growth of industries in many countries, including India.

In India, the development of waterways and ports helped to improve the country's economy. The country's long coastline and several rivers made it an ideal location for the transportation of goods. The growth of ports and waterways in India allowed for the movement of goods from one part of the country to another, helping to spur economic growth and development.

Airways: After World War II, the development of air transportation revolutionized the world's economy. The expansion of air travel allowed for faster and more efficient transportation of goods and people, which helped to boost the world economy.

In India, the growth of airways helped to connect different parts of the country and made it easier for people and goods to move from one place to another. This helped to spur economic growth and development in India.

The growth of air transportation in India also allowed for the expansion of international trade. Indian businesses could now easily access foreign markets, which helped to boost the country's economy.

Conclusion:

The role of waterways and airways in the post-World War II world and India was crucial in shaping the economic and social landscape of these countries. The development of these transportation modes helped to spur economic growth and allowed for the expansion of international trade. Understanding the impact of waterways and airways on the world and India is crucial in understanding the economic and social changes that took place after World War II.

Questions:

1. Mention the role of major ports in imports and exports.
2. Emergence of Deccan airways changed the entire functionalities of domestic airways. Substantiate the statement
3. The waterways and airways contribute to the economic growth of India. Substantiate your answer.

Handout 2 for day 7 of Inter Disciplinary Project of Class X

Title The Role of the World Trade Organization (WTO) in Building New Nations Post-Colonialization

Introduction: After the end of colonialism, many countries faced significant economic and political challenges as they worked to establish themselves as independent nations. The World Trade Organization (WTO) played a crucial role in helping these countries to rebuild their economies and participate in the global economy. In this handout, we will discuss the role of the WTO in building new nations post- colonialization.

What is the WTO?

The WTO is an international organization that was established in 1995 to promote international trade and help countries participate in the global economy.

The WTO provides a forum for countries to negotiate and enforce international trade agreements and helps to ensure that trade is conducted in a fair and predictable manner. The organization also provides technical assistance and advice to help countries improve their trade policies and participate in the global economy.

How has the WTO helped new nations post-colonialization?

After colonial rule ended, many countries faced significant economic challenges as they worked to establish themselves as independent nations. The WTO helped these countries to participate in the global economy by providing a forum for trade negotiations and by helping to enforce international trade agreements.

The WTO also provided technical assistance and advice to help these countries improve their trade policies and participate in the global economy. This helped to spur economic growth and development in these countries and allowed them to become more integrated into the global economy.

By participating in the global economy, new nations post-colonialisation was able to expand their markets, attract foreign investment, and improve their economic performance. The WTO played a crucial role in helping these countries to build their economies and establish themselves as stable, independent nations.

Conclusion:

The WTO played a crucial role in building new nations post-colonialization by helping these countries to participate in the global economy. The organization's trade negotiations, enforcement of international trade agreements, and technical assistance helped to spur economic growth and development in these countries. Understanding the role of the WTO in building new nations post-colonialization is important in understanding the economic and political changes that took place after the end of colonial rule.

ANNEXURE IV

Suggested Template for Presentation by the Students - Class IX & X

Name of the Students (Team):	
Class :	**Section:**
Topics of Interdisciplinary Project:	
Title of the Project:	
Objectives:	
Multiple Assessment: Ex. Surveys / Interviews / Research work/ Observation/ Story based Presentation/ Art integration/ Quiz/ Debate/ role play/ viva, /Group discussion /visual expression/ interactive bulletin boards/ gallery walks/ exit cards/ concept maps/ peer assessment/ art integration /Self-assessment/ integration of technology etc.	
Evidences: Photos, Excerpts from Interviews, observations, Videos, Research References, etc.	
Overall presentation: Link of PPT, shared documents, can be digital/handwritten, as per the convenience of the school.	
Acknowledgement:	
References **(websites, books, newspaper etc.)**	
Reflections:	

ANNEXURE V

Rubrics for Interdisciplinary Project

Rubrics	Marks allocated
Research Work	1
Collaboration & Communication	1
Presentation & Content relevance	1
Competencies- Creativity, Analytical skills, Evaluation, Synthesizing,	2
Total	**5**

संस्कृतम्

विषय-कोड्-सङ्ख्या - 122

कक्षा – नवमी-दशमी (2025-26)

पाठ्यक्रमः परीक्षानिर्देशाश्च

भाष्यते व्यवहारादिषु प्रयुज्यते इति भाषा, मानवः स्वमनसि विद्यमानान् विचारान् भावनाः अनुभूतिं च अर्थयुक्तैः ध्वनिभिः लिखितसङ्केतैः च व्यक्तीकरोति सा भाषा। भाषा अभिप्रायप्रकटनस्य साधनम्। वस्तुतः लोके द्वयोः मनुष्ययोः मध्ये परस्परम् अवबोधनाय, भावग्रहणाय, भावविनिमयाय च भाषया विना न अन्यत् स्पष्टतमं सरलतमं च साधनं विद्यते। लोके बहव्यः भाषाः सन्ति यासु संस्कृतभाषा अतिप्राचीनतमा समृद्धा च अस्ति। संस्कृतभाषायाम् एव सन्ति ऋग्यजुस्सामाथर्वाः चत्वारः वेदाः, शिक्षा, व्याकरणं, निरुक्तं, ज्योतिषं, छन्दः कल्पः चेति षडङ्गानि, चतुर्दशविद्याः, विज्ञानम्, आयुर्वेदः, योगशास्त्रादयः ग्रन्थाः। अतः संस्कृतं केवलं भाषा न अपितु किञ्चन जीवनदर्शनम् इति। इयं विद्या (भाषा) भारतीयानां प्रतिष्ठात्मिका कामधेनुः समस्तज्ञानप्रदात्री, ऐक्यप्रदात्री, धर्मार्थकाममोक्षप्रदात्री च अस्ति। सृष्टेः आदितः अद्यावधिः यत् शिक्षणं ज्ञानविज्ञानं च अस्ति तत् सर्वं अस्यां भाषायामेव सन्निहितम् अस्ति। अतिसूक्ष्मभावनां प्रकटयितुं स्पष्टीकर्तुं संस्कृतं विना नैव अन्यत्र विद्यते सामर्थ्यम्। भारतीयं सर्वस्वं विश्वस्य समग्रं तत्त्वं च अस्यां भाषायाम् अस्ति।

संस्कृतस्य भाषावैज्ञानिकत्त्वम् – ऐतिहासिक-वर्णनात्मक-तुलनात्मकाध्ययन-द्वारा भाषायाः प्रकृतेः विकासोत्पत्तेः संरचनायाः अध्ययनपूर्वकं सर्वेषां विषयाणां सैद्धान्तिकः निर्णयः भाषाविज्ञानेन क्रियते। भाषाविज्ञान-नामकशास्त्रे शब्दानाम् उत्पत्तिः, वाक्यानां संरचना इत्यादीनां विषयाणां विचारः क्रियते। भाषाविज्ञानस्य सम्बन्धः सर्वेषां मानवानां भाषाभिः सह अस्ति। एवं भाषाविज्ञाने ध्वनेः, ध्वनि-उच्चारणोपयोगिनां स्वरयन्त्रमुखजिह्वादि-अङ्गानां प्रकृति-प्रत्ययादीनां, संज्ञासर्वनाम-क्रिया-विशेषणादीनां नामाख्यात-उपसर्जननिपातानां पदपदार्थविषयकानां विकारादीनां विकारमूलककारकाणाम् अन्येषां विविधविषयाणाञ्च अध्ययनं क्रियते। भाषाविज्ञाने संस्कृतभाषा-विषयक-वर्णोत्पत्ति-सिद्धान्तस्य अतीव वैज्ञानिकं निरूपणं कृतं वर्तते।

विश्वस्य सर्वासु भाषासु संस्कृतभाषा प्राचीनतमा अस्ति। प्रायः सर्वासु भाषासु संस्कृतपरकशब्दाः उपलभ्यन्ते। संस्कृतभाषा भारतीयभाषाणां जननी इति कथ्यते। सर्वासु भारतीयभाषासु संस्कृतभाषा अन्तर्लीना अस्ति इति सर्वे अङ्गीकुर्वन्ति।

भारतदेशः बहुभाषी देशोऽस्ति। अस्मिन् देशे अनेकतायाम् एकतावर्धिनी भाषेयं सामाजिकसमरसतायै जीवनविकासाय च आवश्यकी वर्तते। संस्कृतस्य सांस्कृतिकं महत्त्वं वर्णयन्तः विद्वांसः कथयन्ति "भारतस्य प्रतिष्ठे द्वे संस्कृतं संस्कृतिस्तथा, संस्कृतिमूलं संस्कृतम्, साहित्यं संस्कृतिवाहकञ्च इति।" एषा संस्कृतिः न केवलं भारतस्य अपि तु विश्वस्य मुकुटायमाना अस्ति। उक्तं च -

सत्यमहिंसादिगुणैः श्रेष्ठा विश्वबन्धुत्वशिक्षिका।
विश्वशान्तिः सुखधात्री भारतीया हि संस्कृतिः॥
संस्कृते संस्कृतिर्ज्ञेया संस्कृते सकलाः कलाः।
संस्कृते सकलं ज्ञानं संस्कृते किन्न विद्यते॥

एवं संस्कृतभाषा परिनिष्ठिता, दोषरहिता, सरला, गभीरा, यथार्था वैज्ञानिकी च भाषा अस्ति। सम्प्रति युगेस्मिन् प्रमुखैः उद्देश्यैः संस्कृतभाषा शिक्षणीया अस्ति।

शिक्षणोद्देश्यानि –

* वसुधैव-कुटुम्बकम् इति भावनाविकासः।

* भारतीयभाषाणां संरक्षणम्।
* संस्कृतभाषया सम्प्रेषणकौशलविकासः।
* परस्परं संस्कृतसम्भाषणेन भावविनिमयः।
* संस्कृत-भाषया एव संस्कृत-शिक्षणम्।
* श्रवण-भाषण-पठन-लेखनेति चतुर्णां भाषिक-कौशलानां विकासः।
* बौद्धिकविकासपुरस्सरम् आध्यात्मिकनैतिकज्ञानम्।
* मानसिकविकासानन्दानुभूतिः रसानुभूतिश्च।
* भारतीयसंस्कृतेः संरक्षणं ज्ञानवर्धनञ्च।
* आत्मानुशासनसंस्थापनार्थम्
* भाषाशिक्षणकौशलानि वर्धनाय नैपुण्यप्राप्तिः।
* परस्परं वार्तालापमाध्यमेन भावविनिमयः।
* संस्कृतसाहित्यस्य अध्ययनेन ज्ञानानन्दस्य अनुभूतिः।
* मानवजीवनस्य विकासपूर्वकं कल्याणम्।
* संस्कृतभाषया छात्राणां सर्वविधविकासः।

शिक्षणप्रविधयः -

* संस्कृतमाध्यमेन सम्भाषणविधिना शनैः शनैः संस्कृतशिक्षणं सम्भविष्यति। गतिवर्धनाय संस्कृताध्यापकैः धैर्येण स्वकीयाध्यापन-कार्यक्रमाणां नियोजनम्। रुचिकरभाषाभ्यासेन भाषिकोपलब्धिः। भाषिकाभ्यासाय वार्तालाप-कथाश्रवण-वादविवाद-संवाद-वर्णनपरकप्रतियोगिताभिः भाषाशिक्षणं कारयितुं शक्यते।
* विभिन्नप्रामाणिकसंस्थानां कार्यक्रमाः साहित्यसामग्र्यश्च प्रयुज्य उत्तमशिक्षणं कर्तुं शक्यते।
* संस्कृतभाषया उपलब्ध-दृश्य-श्रव्य-सामग्री-माध्यमेन भाषाभ्यासः।
* विभिन्नपाठ्यसामग्रीद्वारा शिक्षकः स्वकीयं शिक्षणकार्यं रुचिकरं कर्तुं शक्नोति।
* भाषाशिक्षकः छात्रान् स्नेहपूर्वकम् (आत्मीयभावेन) पाठयेत्।
* अद्यतनपूर्वकं साहित्यकोश-शब्दकोश-सन्दर्भग्रन्थानां सहायतया छात्राणां तत्परतावर्धनम्।
* प्राचीनार्वाचीनयोर्मध्ये समन्वयस्थापनद्वारा नूतनशिक्षणविधिभिश्च संस्कृतशिक्षणम्।

कौशलानि-

* **श्रवणकौशलम्** – भावाधिग्रहणाय ध्वन्यात्मकं भाषायाः प्रथमं कौशलम् इदम्। अस्य साधनानि- गुरुमुखम्, आकाशवाणी, दूरवाणी, परिवारसदस्याः, समाजः, कक्ष्याः, ध्वनिमुद्रणयन्त्रम्, दूरदर्शनम् इत्यादीनि।
* **भाषणकौशलम्**- भावाभिव्यक्तये ध्वन्यात्मकं भाषायाः इदं द्वितीयं कौशलम्। वाग्-रूपं भावप्रकटनम् एव भाषणम्, परिसरप्रभावेण आधारेण वा भाषणशक्तिः जायते।
* **पठनकौशलम्** – भावाधिग्रहणाय लिप्यात्मकं भाषायाः तृतीयं कौशलम् इदम्। (अर्थग्रहणपूर्वकं स्पष्टरूप-वाचनम् इत्यर्थः)
* **लेखनकौशलम्**- भावाभिव्यक्तये लिप्यात्मकं भाषायाः चतुर्थं कौशलम् इदम्। (ध्वनिरूपे विद्यमानं भाषांशं लिपिरूपे अवतारणं लेखनम् इति उच्यते)
* ज्ञानात्मक-अवबोधनात्मक-अनुप्रयोगात्मक-विश्लेषणात्मक-संश्लेषणात्मक-मूल्याङ्कनात्मक-लक्षिताधिगमनविशेषाः।

संस्कृतम्

विषय-कोड्-सङ्ख्या - 122

कक्षा - नवमी (2025-26)

आहत्याङ्काः – 80+20

वार्षिकमूल्याङ्कनाय निर्मिते प्रश्नपत्रे चत्वारः खण्डाः भविष्यन्ति –

'क' खण्डः	**अपठितावबोधनम्**	**10 अङ्काः**
'ख' खण्डः	**रचनात्मककार्यम्**	**15 अङ्काः**
'ग' खण्डः	**अनुप्रयुक्तव्याकरणम्**	**25 अङ्काः**
'घ' खण्डः	**पठितावबोधनम्**	**30 अङ्काः**

खण्डानुसारं विषयाः मूल्यभारः च

क्र. सं.	विषयाः	प्रश्नप्रकाराः	मूल्यभारः
		'क' खण्डः	
		अपठितावबोधनम्	**10 अङ्काः**
1.	एकः गद्यांशः (80-100 शब्दपरिमितः)	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ शीर्षकम् (लघूत्तरात्मकः) भाषिककार्यम् (बहुविकल्पात्मकाः)	2×1=2 2×2=4 1×1=1 3×1=3
		पूर्णभारः	**10 अङ्काः**
		'ख' खण्डः	
		रचनात्मककार्यम्	**15 अङ्काः**
2.	औपचारिकम् अथवा अनौपचारिकं पत्रम् (पूर्णं पत्रं लेखनीयम्)	निबन्धात्मकः	5
3.	चित्रवर्णनम् अथवा अनुच्छेदलेखनम्	पूर्णवाक्यात्मकाः / निबन्धात्मकः	5
4.	हिन्दी/आङ्ग्लभाषातः संस्कृतेन अनुवादः	पूर्णवाक्यात्मकः	5×1=5
		पूर्णभारः	**15 अङ्काः**
		'ग' खण्डः	
		अनुप्रयुक्तव्याकरणम्	**25 अङ्काः**
5.	सन्धिः	लघूत्तरात्मकाः	4×1=4
6.	शब्दरूपाणि	बहुविकल्पात्मकाः	4×1=4
7.	धातुरूपाणि	बहुविकल्पात्मकाः	4×1=4
8.	कारक-उपपदविभक्तयः	बहुविकल्पात्मकाः	4×1=4
9.	प्रत्ययाः	बहुविकल्पात्मकाः	3×1=3
10.	सङ्ख्याः	लघूत्तरात्मकाः	4×½=2
11.	उपसर्गाः	लघूत्तरात्मकाः	4×½=2
12.	अव्ययानि	बहुविकल्पात्मकौ	2×1=2

		पूर्णभारः	**25 अङ्काः**
	'घ' खण्डः **पठितावबोधनम्**		**30 अङ्काः**
13.	गद्यांशः	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ लघूत्तरात्मकौ (भाषिककार्यम्)	2×½=1 2×1=2 2×1=2
14.	पद्यांशः	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ लघूत्तरात्मकौ (भाषिककार्यम्)	2×½=1 2×1=2 2×1=2
15.	नाट्यांशः	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ लघूत्तरात्मकौ (भाषिककार्यम्)	2×½=1 2×1=2 2×1=2
16.	प्रश्ननिर्माणम्	पूर्णवाक्यात्मकाः	4×1=4
17.	अन्वयः अथवा भावार्थः	निबन्धात्मकः	3
18.	घटनाक्रमानुसारं वाक्यलेखनम्	निबन्धात्मकः	8×½=4
19.	(क) प्रसङ्गानुसारम् अर्थस्य लेखनम् (ख) शब्दानाम् अर्थैः सह मेलनम्	लघूत्तरात्मकाः लघूत्तरात्मकाः	4×½=2 4×½=2
		पूर्णभारः	**30 अङ्काः**

सम्पूर्णभारः 80 अङ्काः

प्रश्नपत्र-प्रारूपम् / संरचना

संस्कृतम्

विषय-कोड्-सङ्ख्या - 122

कक्षा - नवमी (2025-26)

प्रश्नप्रकारः	प्रश्नानां सङ्ख्या	विभाग-सङ्ख्या	प्रतिप्रश्नम् अङ्कभारः	आहत्याङ्काः
अति-लघूत्तरात्मकाः ½ अङ्कः	2+2+2=6	3	½	3
अति-लघूत्तरात्मकाः 1 अङ्कः	2=2	1	1	2
बहुविकल्पात्मकाः 1 अङ्कः	3+4+4+4+3=18	5	1	18
लघूत्तरात्मकाः ½ अङ्कः	4+4+4+4+4=20	5	½	10
लघूत्तरात्मकाः 1 अङ्कः	2+2+2+1+4=11	5	1	11
दीर्घोत्तरात्मकाः ½ अङ्कः	8=8	1	½	4
दीर्घोत्तरात्मकाः 1 अङ्कः	5+5+2+2+2+4=20	6	1	20
दीर्घोत्तरात्मकाः 2 अङ्कौ	2=2	1	2	4
निबन्धात्मकाः 3 अङ्काः	1=1	1	3	3
निबन्धात्मकाः 5 अङ्काः	1=1	1	5	5
			आहत्याङ्काः	**80**

संस्कृतम्

विषय-कोड्-सङ्ख्या - 122

कक्षा-नवमी (2025-26)

वार्षिकं मूल्याङ्कनम्

'क' खण्डः **अपठितावबोधनम्**	**(10 अङ्काः)**
1. एकः अपठितः गद्यांशः 80-100 शब्दपरिमितः गद्यांशः, सरलकथा वर्णनं वा ➢ एकपदेन पूर्णवाक्येन च अवबोधनात्मकं कार्यम् (2+4) ➢ शीर्षकलेखनम् (1) ➢ अनुच्छेदाधारितं भाषिकं कार्यम् (3) भाषिककार्याय तत्त्वानि - ✓ वाक्ये कर्तृ-क्रियापदचयनम् ✓ कर्तृ-क्रिया-अन्वितिः ✓ विशेषण-विशेष्यचयनम् ✓ पर्याय-विलोमपदचयनम् ✓ सर्वनामस्थाने संज्ञाप्रयोगः	10
'ख' खण्डः **रचनात्मककार्यम्**	**(15 अङ्काः)**
2. औपचारिकम् अथवा अनौपचारिकं पूर्णपत्रलेखनम् सम्भावितविषयाः – ➢ औपचारिकम् - अवकाशार्थम्, स्वच्छतायै स्वास्थ्यविभागाय, विद्युद्विभागाय, वित्तकोषाय, आरक्षकालयाय, प्रकाशकाय इत्यादयः। ➢ अनौपचारिकम् - पितृभ्याम्, वर्धापनपत्रम्, निमन्त्रणपत्रम्, परिणामसूचनापत्रम् इत्यादयः। 3. चित्राधारितं वर्णनम् अथवा अनुच्छेदलेखनम् (मञ्जूषायाः सहायतया चित्रवर्णनम् अनुच्छेदलेखनं वा करणीयम्) 4. हिन्दीभाषायाम् आङ्ग्लभाषायां वा लिखितानां पञ्चवाक्यानां संस्कृतभाषायाम् अनुवादः	5 5 5
'ग' खण्डः **अनुप्रयुक्तव्याकरणम्**	**(25 अङ्काः)**
5. सन्धिकार्यम् ➢ स्वरसन्धिः - दीर्घः, गुण, वृद्धिः, यण्, अयादि ➢ व्यञ्जनसन्धिः –जश्त्वसन्धिः, 'म्' स्थाने अनुस्वारः	4

➢ विसर्गसन्धिः – उत्वम्, रत्वम्, लोपः	
6. शब्दरूपाणि ➢ अकारान्तपुँल्लिङ्गशब्दाः – बालकवत् ➢ इकारान्तपुँल्लिङ्गशब्दाः – कविवत् ➢ उकारान्तपुँल्लिङ्गशब्दाः – साधुवत् ➢ ऋकारान्तपुँल्लिङ्गशब्दाः – पितृवत् ➢ आकारान्तस्त्रीलिङ्गशब्दाः - लतावत् ➢ ईकारान्तस्त्रीलिङ्गशब्दाः – नदीवत् ➢ ऋकारान्तस्त्रीलिङ्गशब्दाः – मातृवत् ➢ हलन्ताः - राजन्, भवत्, विद्वस्, गुणिन् ➢ सर्वनामशब्दाः – अस्मद्, युष्मद्, तत्, इदम्, किम् (त्रिषु लिङ्गेषु)	4
7. धातुरूपाणि ➢ पठ्, गम्, वद्, भू, क्रीड्, नी, दृश्, शक्, ज्ञा, अस्, कृ, दा, क्री, श्रु, पा (पिब्), सेव्, लभ्, रुच् (पञ्चसु लकारेषु)	4
8. कारक-उपपद-विभक्तयः ➢ द्वितीया – उभयतः, धिक्, परितः, समया, निकषा, प्रति, विना ➢ तृतीया – सह, साकम्, समम्, सार्धम्, विना, अलम्, सदृश, हीन ➢ चतुर्थी – रुच्, दा (यच्छ्), नमः, कुप्, स्वस्ति ➢ पञ्चमी – विना, बहिः, भी, रक्ष्, ऋते ➢ षष्ठी – उपरि, अधः, पुरतः, पृष्ठतः, निर्धारणे ➢ सप्तमी- स्निह्, निपुणः, विश्वस्, पटु	4
9. प्रत्ययाः ➢ क्त्वा, तुमुन्, ल्यप्, क्तवतु, शतृ, शानच्, क्त	3
10. सङ्ख्या – 1-100 (1-4 केवलं प्रथमा-विभक्तौ)	2
11. उपसर्गाः (द्वाविंशतिः)	2
12. अव्ययानि ➢ स्थानबोधकानि – अत्र, तत्र, अन्यत्र, सर्वत्र, यत्र, एकत्र, उभयत्र ➢ कालबोधकानि – यदा, तदा, सर्वदा, एकदा, पुरा, अधुना, अद्य, श्वः, ह्यः ➢ प्रश्नबोधकानि – किम्, कुत्र, कति, कदा, कुतः, कथम्, किमर्थम् ➢ अन्यानि – च, अपि, यदि, तर्हि, यथा, तथा, सम्यक्, एव, तु	2
'घ' खण्डः **पठितावबोधनम्**	**(30 अङ्काः)**
13. गद्यांशम् अधिकृत्य अवबोधनात्मकं कार्यम् प्रश्नप्रकाराः – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि भाषिककार्यम् –	5

➢ वाक्ये कर्तृ-क्रियापदचयनम् ➢ विशेषण-विशेष्यचयनम् ➢ पर्याय-विलोमपचयनम् ➢ सर्वनामस्थाने संज्ञाप्रयोगः	
14. पद्यांशम् अधिकृत्य अवबोधनात्मकं कार्यम् प्रश्नप्रकाराः – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि भाषिककार्यम् – ➢ वाक्ये कर्तृ-क्रियापदचयनम् ➢ विशेषण-विशेष्यचयनम् ➢ पर्याय-विलोमपचयनम् ➢ सर्वनामस्थाने संज्ञाप्रयोगः	5
15. नाट्यांशम् अधिकृत्य अवबोधनात्मकं कार्यम् प्रश्नप्रकाराः – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि भाषिककार्यम् – ➢ वाक्ये कर्तृ-क्रियापदचयनम् ➢ विशेषण-विशेष्यचयनम् ➢ पर्याय-विलोमपचयनम् ➢ सर्वनामस्थाने संज्ञाप्रयोगः	5
16. वाक्येषु रेखाङ्कितपदानि अधिकृत्य उचितप्रश्ननिर्माणम्	4
17. श्लोकान्वयः/ एकस्य श्लोकस्य संस्कृतेन भावार्थलेखनम्	3
18. घटनाक्रमानुसारं कथालेखनम्	4
19. (क) प्रसङ्गानुसारम् अर्थलेखनम् (ख) शब्दानाम् अर्थैः सह मेलनम् (पाठान् आधृत्य लघूत्तरात्मकाः प्रश्नाः)	2 2

आहत्याङ्काः - 80

परीक्षायै निर्धारिताः पाठाः

पाठसङ्ख्या	पाठनाम		पाठसङ्ख्या	पाठनाम
प्रथमः पाठः	भारतीवसन्तगीतिः		सप्तमः पाठः	सिकतासेतुः
द्वितीयः पाठः	स्वर्णकाकः		अष्टमः पाठः	जटायोः शौर्यम्
तृतीयः पाठः	गोदोहनम्		नवमः पाठः	पर्यावरणम्
चतुर्थः पाठः	सूक्तिमौक्तिकम्		दशमः पाठः	वाङ्मनः प्राणस्वरूपम्
पञ्चमः पाठः	भ्रान्तो बालः			

निर्धारित – पाठ्यपुस्तकानि –

1. 'शेमुषी' प्रथमो भागः, पाठ्यपुस्तकम् , संशोधितसंस्करणम्
   (प्रकाशनम् – रा.शै.अनु.प्र.परि. द्वारा)
2. 'अभ्यासवान् भव'-प्रथमो भागः – व्याकरणपुस्तकम्
   (प्रकाशनम् – रा.शै.अनु.प्र.परि. द्वारा)
3. 'व्याकरणवीथिः'- व्याकरणपुस्तकम्
   (प्रकाशनम् – रा.शै.अनु.प्र.परि. द्वारा)

अवधेयम् -

* अनुप्रयुक्तव्याकरणस्य अंशानां चयनं यथासम्भवं 'शेमुषी-प्रथमो भागः इति' पाठ्यपुस्तकात् करणीयम्। यदि ततः न सम्भवति तर्हि 'अभ्यासवान् भव-प्रथमो भागः' इत्यस्मात् चेतुं शक्यते।

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संस्कृतम्

विषय-कोड्-सङ्ख्या - 122

कक्षा - दशमी (2025-26)

वार्षिकमूल्याङ्कनाय निर्मिते प्रश्नपत्रे चत्वारः खण्डाः भविष्यन्ति -

'क' खण्डः	**अपठित-अवबोधनम्**	**10 अङ्काः**
'ख' खण्डः	**रचनात्मक-कार्यम्**	**15 अङ्काः**
'ग' खण्डः	**अनुप्रयुक्त-व्याकरणम्**	**25 अङ्काः**
'घ' खण्डः	**पठित-अवबोधनम्**	**30 अङ्काः**

खण्डानुसारं विषयाः मूल्यभारः च

क्र. सं.	विषयाः	प्रश्नप्रकाराः	मूल्यभारः
	'क' खण्डः **अपठितावबोधनम्** **10 अङ्काः**		
1	एकः गद्यांशः 80-100 शब्दपरिमितः	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ शीर्षकम् (लघूत्तरात्मकः) भाषिककार्यम् (बहुविकल्पात्मकाः)	2×1=2 2×2=4 1×1=1 3×1=3
		सम्पूर्णभारः	**10 अङ्काः**
	'ख' खण्डः **रचनात्मककार्यम्** **15 अङ्काः**		
2.	औपचारिकम् अथवा अनौपचारिकं पत्रम् (मञ्जूषायाः सहायतया पूर्णं पत्रं लेखनीयम्)	निबन्धात्मकः	5
3.	चित्रवर्णनम् अथवा अनुच्छेदलेखनम्	निबन्धात्मकः	5
4.	हिन्दी/आङ्ग्लभाषातः संस्कृतेन अनुवादः	पूर्णवाक्यात्मकः	5×1=5
		सम्पूर्णभारः	**15 अङ्काः**
	'ग' खण्डः **अनुप्रयुक्तव्याकरणम्** **25 अङ्काः**		
5.	सन्धिः	लघूत्तरात्मकाः	4×1=4
6.	समासः	बहुविकल्पात्मकाः	4×1=4
7.	प्रत्ययाः	बहुविकल्पात्मकाः	4×1=4
8.	वाच्यप्रकरणम्	बहुविकल्पात्मकाः	3×1=3
9.	समयः	लघूत्तरात्मकाः	4×1=4
10.	अव्ययपदानि	बहुविकल्पात्मकाः	3×1=3
11.	संशोधनकार्यम्	बहुविकल्पात्मकाः	3×1=3
		सम्पूर्णभारः	**25 अङ्काः**

‘घ’ खण्डः पठितावबोधनम् 30 अङ्काः			
12.	गद्यांशः	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ लघूत्तरात्मकौ (भाषिककार्यम्)	2×½=1 2×1=2 2×1=2
13.	पद्यांशः	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ लघूत्तरात्मकौ (भाषिककार्यम्)	2×½=1 2×1=2 2×1=2
14.	नाट्यांशः	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ लघूत्तरात्मकौ (भाषिककार्यम्)	2×½=1 2×1=2 2×1=2
15.	प्रश्ननिर्माणम्	पूर्णवाक्यात्मकाः	4×1=4
16.	अन्वयः अथवा भावार्थः	पूर्णवाक्यात्मकाः	4×1=4
17.	घटनाक्रमानुसारं वाक्यलेखनम्	पूर्णवाक्यात्मकाः	8×½=4
18.	प्रसङ्गानुकूलम् अर्थलेखनम्	लघूत्तरात्मकाः	3×1=3
		पूर्णभारः	**30 अङ्काः**

सम्पूर्णभारः - 80 अङ्काः

प्रश्नपत्र-प्रारूपम् / संरचना

संस्कृतम्

विषय-कोड्-सङ्ख्या - 122

कक्षा - दशमी (2025-26)

प्रश्नप्रकारः	प्रश्नानां सङ्ख्या	विभाग-सङ्ख्या	प्रतिप्रश्नम् अङ्कभारः	आहत्याङ्काः
अति-लघूत्तरात्मकाः ½ अङ्कः	2+2+2=6	3	½	3
अति-लघूत्तरात्मकाः 1 अङ्कः	2=2	1	1	2
बहुविकल्पात्मकाः 1 अङ्कः	3+4+4+3+3=17	5	1	17
लघूत्तरात्मकाः 1 अङ्कः	2+2+2+1+4+4+3+3=21	8	1	21
दीर्घोत्तरात्मकाः ½ अङ्कः	10+8=18	2	½	9
दीर्घोत्तरात्मकाः 1 अङ्कः	5+5+2+2+2+4+4=24	7	1	24
दीर्घोत्तरात्मकाः 2 अङ्कौ	2=2	1	2	4
			आहत्याङ्काः	**80**

संस्कृतम्

विषय-कोड्-सङ्ख्या - 122

कक्षा - दशमी (2025-26)

वार्षिकं मूल्याङ्कनम् 80 अंकाः

'क' खण्डः **अपठितावबोधनम्**		**(10 अङ्काः)**
1. एकः अपठितः गद्यांशः 80-100 शब्दपरिमितः गद्यांशः, सरलकथा, वर्णनं वा ➢ एकपदेन पूर्णवाक्येन च अवबोधनात्मकं कार्यम् ➢ शीर्षकलेखनम् ➢ अनुच्छेदाधारितं भाषिकं कार्यम् भाषिककार्याय तत्त्वानि - ✓ वाक्ये कर्तृ-क्रियापदचयनम् ✓ कर्तृ-क्रिया-अन्वितिः ✓ विशेषण-विशेष्यचयनम् ✓ पर्याय-विलोमपदचयनम् ✓ सर्वनामस्थाने संज्ञाप्रयोगः	2+4+1 3	10
'ख' खण्डः **रचनात्मककार्यम्**		**(15 अङ्काः)**
2. औपचारिकम् अथवा अनौपचारिकं पूर्णपत्रलेखनम् सम्भावितविषयाः – ➢ औपचारिकम् - संस्कृतभाषा-संवर्धनाय, शिक्षामन्त्रालयाय, नाम संशोधनाय नगरनिगमाय, धनादेश-अप्राप्तेः सूचनायै पत्रालयविभागाय, शुल्कनिवारणार्थं प्रधानाचार्याय, प्रकाशकाय इत्यादयः। ➢ अनौपचारिकम् - कुशलक्षेमपत्रम्, वर्धापनपत्रम्, निमन्त्रणपत्रम्, परिणामसूचनापत्रम्, विद्यालयवर्णनम् इत्यादयः।		5
3. चित्राधारितं वर्णनम् अथवा अनुच्छेदलेखनम् (मञ्जूषायाः सहायतया चित्रवर्णनम् अनुच्छेदलेखनं वा करणीयम्)		5
4. हिन्दीभाषायाम् आङ्ग्लभाषायां वा लिखितानां पञ्चवाक्यानां संस्कृतभाषायाम् अनुवादः		5
'ग' खण्डः **अनुप्रयुक्तव्याकरणम्**		**(25 अङ्काः)**
5. सन्धिकार्यम्	(1+1+2)	4

➢ स्वरसन्धिः - यण्, अयादि, पूर्वरूपसन्धिः ➢ व्यञ्जनसन्धिः - वर्गीयप्रथमवर्णस्य तृतीयवर्णे परिवर्तनम्, प्रथमवर्णस्य पञ्चमवर्णे परिवर्तनम् ➢ विसर्गसन्धिः - विसर्गस्य उत्वम्, रत्वम्, विसर्गलोपः, विसर्गस्य स्थाने स्, श्, ष् 6. समासः - वाक्येषु समस्तपदानां विग्रहः विग्रहपदानां च समासः (1+1+1+1) ➢ तत्पुरुषः – (विभक्ति-तत्पुरुषः, उपपद- तत्पुरुषः, कर्मधारयः) ➢ बहुव्रीहिः ➢ अव्ययीभावः (अनु, उप, सह, निर्, प्रति, यथा) ➢ द्वन्द्वः	4
7. प्रत्ययाः (1+2+1) ➢ कृत्प्रत्ययाः – तव्यत्, अनीयर्, क्त, क्तवतु ➢ तद्धिताः – मतुप्, ठक्, त्व, तल् ➢ स्त्रीप्रत्ययौ – टाप् , ङीप्	4
8. वाच्यपरिवर्तनम् - केवलं लट्लकारे (कर्तृ-कर्म-क्रिया)	3
9. समयः - अङ्कानां स्थाने शब्देषु समयलेखनम् (सामान्य-सपाद-सार्ध-पादोन)	4
10. अव्ययपदानि उच्चैः, च, श्वः, ह्यः, अद्य, अत्र-तत्र, यत्र-कुत्र, इदानीम्, (अधुना, सम्प्रति, साम्प्रतम्) यदा, तदा, कदा, सहसा, वृथा, शनैः, अपि, कुतः, इतस्ततः, यदि-तर्हि, यावत्-तावत्	3
11. अशुद्धि-संशोधनम् (वचन-लिङ्ग-पुरुष-लकार-विभक्तिदृष्ट्या संशोधनम्)	3
'घ' खण्डः **पठितावबोधनम्**	**(30 अङ्काः)**
12. गद्यांशम् अधिकृत्य अवबोधनात्मकं कार्यम् प्रश्नप्रकाराः – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि भाषिककार्यम् – ➢ वाक्ये कर्तृ-क्रियापदचयनम् ➢ विशेषण-विशेष्यचयनम् ➢ पर्याय-विलोमपदचयनम् ➢ सर्वनामस्थाने संज्ञाप्रयोगः	5
13. पद्यांशम् अधिकृत्य अवबोधनात्मकं कार्यम् प्रश्नप्रकाराः – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि भाषिककार्यम् – ➢ वाक्ये कर्तृ-क्रियापदचयनम् ➢ विशेषण-विशेष्यचयनम् ➢ पर्याय-विलोमपदचयनम् ➢ सर्वनामस्थाने संज्ञाप्रयोगः	5

14. नाट्यांशम् अधिकृत्य अवबोधनात्मकं कार्यम् प्रश्नप्रकाराः – एकपदेन पूर्णवाक्येन च प्रश्नोत्तराणि भाषिककार्यम् – ➢ वाक्ये कर्तृ-क्रियापदचयनम् ➢ विशेषण-विशेष्यचयनम् ➢ पर्याय-विलोमपदचयनम् ➢ सर्वनामस्थाने संज्ञाप्रयोगः	5
15. वाक्येषु रेखाङ्कितपदानि अधिकृत्य चतुर्णां प्रश्नानां निर्माणम्	4
16. श्लोकान्वयः/ एकस्य श्लोकस्य संस्कृतेन भावार्थलेखनम्	4
17. घटनाक्रमानुसारं कथालेखनम्	4
18. प्रसङ्गानुकूलम् अर्थलेखनम् (पाठान् आधृत्य लघूत्तरात्मकाः प्रश्नाः)	3

आहत्याङ्काः - 80

परीक्षायै निर्धारिताः पाठाः

पाठसङ्ख्या	पाठनाम
प्रथमः पाठः	शुचिपर्यावरणम्
द्वितीयः पाठः	बुद्धिर्बलवती सदा
चतुर्थः पाठः	शिशुलालनम्
पञ्चमः पाठः	जननी तुल्यवत्सला
षष्ठः पाठः	सुभाषितानि
सप्तमः पाठः	सौहार्दं प्रकृतेः शोभा
अष्टमः पाठः	विचित्रः साक्षी
नवमः पाठः	सूक्तयः
द्वादशः पाठः	अन्योक्तयः

निर्धारित-पाठ्यपुस्तकानि –

1. "शेमुषी' पाठ्यपुस्तकम् भाग-2" , संशोधितसंस्करणम् (प्रकाशनम् – रा.शै.अनु.प्र.परि. द्वारा)
2. "अभ्यासवान् भव-द्वितीयो भागः" – व्याकरणपुस्तकम् (प्रकाशनम् – रा.शै.अनु.प्र.परि. द्वारा)
3. "व्याकरणवीथिः"- व्याकरणपुस्तकम् (प्रकाशनम् – रा.शै.अनु.प्र.परि. द्वारा)

अवधेयम् -

* अनुप्रयुक्तव्याकरणस्य अंशानां चयनं यथासम्भवं 'शेमुषी-द्वितीयो भागः इति' पाठ्यपुस्तकात् करणीयम्। यदि ततः न सम्भवति तर्हि 'अभ्यासवान् भव- द्वितीयो भागः' इत्यस्मात् चेतुं शक्यते।

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नवमी/दशमी

आन्तरिक-मूल्याङ्कनम् - 20 अङ्काः

उद्देश्यानि

- ❖ छात्राणां सृजनात्मकक्षमतायाः विकासः।
- ❖ श्रवण-भाषण-पठन-लेखनकौशलानां विकासः।
- ❖ चिन्तनक्षमतायाः आत्मविश्वासस्य च संवर्धनम्।

क्र. सं.	गतिविधयः	उदाहरणानि	अङ्काः	निर्देशाः	मूल्याङ्कनबिन्दवः
1.	**आवधिक-परीक्षाः (पीरियोडिक् - असैसमैंट)**	लिखितपरीक्षा	05	विद्यालयेन समये समये लिखितपरीक्षाणाम् आयोजनं करणीयं भवति।	परीक्षासु यत्र विद्यार्थिनः श्रेष्ठाः अङ्काः स्युः तयोः द्वयोः परीक्षयोः एव अधिभारः ग्रहीतव्यः। अपि च आवधिकपरीक्षासु अपि प्रश्नेषु आन्तरिकविकल्पाः देयाः। मूल्याङ्कनसमये यदि छात्रः सर्वान् प्रश्नान् उत्तरति तर्हि छात्रहिताय यत्र अधिकाः अङ्काः सन्ति तेषाम् एव मूल्याङ्कनं करणीयम्।
2	**बहुविधमूल्याङ्कनम्**	❖ कक्षायां पाठितस्य पाठस्य लघुमूल्याङ्कनम् ❖ निर्गतपत्राणि ❖ प्रश्नोत्तरी ❖ मौखिकी परीक्षा ❖ प्रतियोगिताः ❖ प्रश्नमञ्चस्यायोजनम्	05	कक्षायां पाठित-पाठस्य विषयस्य वा बहुविधं मूल्याङ्कनम् अपेक्षितम् अस्ति। अनेन विद्यार्थिनां विविधकौशलानां मूल्याङ्कनं भवेत्।	❖मौलिकता ❖विषयसम्बद्धता ❖शुद्धता ❖समयबद्धता ❖प्रस्तुतीकरणम्
3.	**निवेशसूचिका (पोर्टफोलियो)**	❖ कक्षाकार्यम् ❖ सामूहिक-मूल्याङ्कनम् ❖ स्वमूल्याङ्कनम् ❖ विद्यार्थिनः विषयगताः उपलब्धयः	05	विद्यार्थिभिः कक्षायां कृतानां कार्याणाम् उपलब्धीनां च संरक्षणं संयोजनं च सञ्चिकायां पत्रावल्यां वा करणीयम्। एतेन समग्रं मूल्याङ्कनं प्रमाणिकत्वेन भवितुं शक्नोति।	❖ सुलेखः ❖ तथ्यात्मकता ❖ प्रामाणिकता ❖ समयबद्धता

4.	**भाषा-संवर्धनाय गतिविधयः** **(क) श्रवण-भाषण-कौशलम्**	❖ कथा ❖ संवादः/ वार्तालापः ❖ भाषणम् ❖ नाटकम् ❖ वार्ताः ❖ आशुभाषणम् ❖ संस्कृतगीतानि ❖ श्लोकोच्चारणम् ❖ प्रहेलिकाः	05	❖ छात्राः कामपि कथां श्रावयितुं शक्नुवन्ति। ❖ शिक्षकः कमपि विषयं सूचयित्वा परस्परं संवादं कारयितुं शक्नोति। ❖ दूरदर्शने वार्तावली इत्याख्यः संस्कृत-कार्यक्रमः प्रसारितः भवति तं द्रष्टुं छात्राः प्रेरणीयाः। ❖ श्रवण-कौशल-मूल्याङ्कनाय शिक्षकः स्वयम् अपि कथां श्रावयित्वा ततः सम्बद्ध-प्रश्नान् प्रष्टुं शक्नोति।	❖ उच्चारणम् ❖ शुद्धता ❖ समयबद्धता ❖ प्रस्तुतीकरणम् (आरोहावरोह-गतियति-प्रयोगः)
	(ख) लेखनकौशलम्	❖ विविधविषयान् आधृत्य मौलिकलेखनम् यथा– देशः, माता, पिता, गुरुः, विद्या पर्यावरणम्, योगः, समयस्य सदुपयोगः, शिक्षा, अनुशासनम् इत्यादयः। ❖ शैक्षिकभ्रमणस्य संस्कृतेन प्रतिवेदनलेखनम्। ❖ दैनन्दिनीलेखनम्। ❖ सङ्केताधारितं कथालेखनम्। ❖ भित्तिपत्रिकायाः निर्माणम्। ❖ श्रुतलेखः। ❖ सूक्तिलेखनम्।		❖ छात्राः यथाशक्यं कक्षायामेव लेखनकार्यं कुर्युः। ❖ टिप्पणी- पुस्तिकायाः निर्माणम्। ❖ वैयक्तिकपरीक्षणम्।	❖ विषय-सम्बद्धता ❖ शुद्धता (विशेषतः पञ्चमवर्णस्यप्रयोगः) ❖ समयबद्धता ❖ सुलेखः ❖ प्रस्तुतीकरणम्
	अवधातव्यम् –उपर्युक्त-गतिविधयः उदाहरणरूपेण प्रदत्ताः सन्ति। एतदतिरिच्य एतादृशाः अन्यगतिविधयः अपि भवितुमर्हन्ति।				

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CURRICULUM
MARATHI
(009)
IX-X
2025-26

अभ्यासक्रम प्रारुप –इयत्ता नववी, दहावी **(009)**

प्रस्तावना –

मानवी जीवनात भाषेला अनन्यसाधारण महत्व आहे. मानवाला मिळालेली ती अमूल्य अशी देणगी आहे. आत्मसंवाद व परसंवाद साधण्याचे ते एक प्रभावी साधन आहे की जे आपण लिखित किंवा मौखिक स्वरुपात व्यक्त करु शकतो. संवाद साधण्यासाठी लिहिणे, वाचणे, बोलणे, इशारे, हावभाव , मूक अभिनय, मुद्राभाव अशी अनेक माध्यमे आहेत. परंतु भाषा हे अतिशय प्रभावी साधन आहे. भाषा हे आपले विचार मते,भावना आणि जाणिवा प्रगट करण्याचे एक साधन आहे. ती भाषा कोणतेही असो मातृभाषा असो अथवा इतर भाषा असो. व्यक्तीच्या 'व्यक्त होणे' या स्थायीभावासाठी ती उपयुक्त आहे.भाषेच्या विकासाच्या अनेक पायऱ्यापैकी आकलन,शब्दसंग्रह वाढविणे, वाक्यरचना,शब्दोच्चारण हे चार प्रमुख टप्पे आहेत. व्यक्तीच्या विकासानुसार त्याचे स्तर उंचावत जातात.

'मराठी'महाराष्ट्र राज्याची अधिकृत भाषा आहे. यास्तव ती आपणास अवगत असणे गरजेचे आहे. देवगिरीच्या यादवांच्या काळात उदयास आलेल्या या भाषेत महानुभव व वारकरी संप्रदायापासून आजतागायत अनेक तत्ववेत्यांनी,साहित्यिकांनी ती वाढविण्याची तिचे संवर्धन करण्याचे मोलाचे कार्य केले आहे. मराठी भाषेतील वा.डमयाला प्रदीर्घ परंपरा आहे. लिखित वाड.मयाबरोबर लोक वाड.मयाची परंपरा आहे.

'माझा मराठीचि बोलु कौतुकें |परि अमृतातेहीं पैजासीं जिंके |

ऐसीं अक्षरें रसिकें मेळवीन| 'अशी प्रतिज्ञां संत ज्ञानेश्वरांनी केली आणि ती तडीस नेली. ' विवेकसिंधु' हा ग्रंथ लिहिणारे आद्य कवी मुकुंदराज,' ज्ञानेश्वरी','अमृतानुभव','चांगदेव पासष्टी' असे ग्रंथ लिहिणारे श्री संत ज्ञानेश्वर यांनी मराठी भाषा संपन्न केली.

' मराठी असे आमुची मायबोली' असे प्रत्येक माणसाने अभिमानाने म्हटले पाहिजे. मराठीतून बोलणे, मराठीतून पत्रव्यवहार करणे, मराठी वृत्तपत्रे व ग्रंथाचे वाचन करणे हे आपणा सर्वांचेच कर्तव्य आहे. महाराष्ट्राची राजभाषा मराठी असलेल्या या महाराष्ट्रात अनेक बोलीभाषा आहेत.

२७ फेब्रुवारी हा जेष्ठ साहित्यिक विष्णू वामन शिरवाडकर अर्थात कुसुमाग्रज यांचा जन्मदिवस ' जागतिक मराठी भाषा दिन' म्हणून साजरा केला जातो. श्रवण कौशल्य म्हणजे ऐकणे, भाषण संभाषण कौशल्य म्हणजे बोलणे,वाचन कौशल्य म्हणजे आपल्यासमोरील मजकूर वाचणे, लेखन कौशल्य म्हणजे सुंदर सुवाच्च अक्षरात लिहिणे अशा सर्व कौशल्यांवर प्रभुत्व मिळविण्यासाठी मराठी भाषा शिक्षण महत्वाचे आहे.

' लाभले आम्हास भाग्य बोलतो मराठी
जाहलो खरेच धन्य ऐकतो मराठी
धर्म,पंथ, जात एक जाणतो मराठी
एवढ्या जगात माय मानतो मराठी'

अशा सुंदर शब्दात कवी सुरेश भट यांनी माय मराठीचे वर्णन केले आहे. इ.स.१९६० मध्ये मराठी भाषिकांच्या एकसंघ महाराष्ट्र राज्यास मान्यता मिळाली आणि मराठीस राजभाषेचा मुकुट प्राप्त झाला. अशा या भाषेत आपले विचार,मते,कल्पना,भावभावना समोरील व्यक्तीसमोर योग्यप्रकारे आणि प्रभावीपणे मांडता याव्यात,भाषेवर प्रभुत्व हवे.भाषेचा विविध प्रकारे वापर करणे यास्तव विविध साहित्य प्रकाराचा समावेश प्रस्तुत प्रारुपात करण्यात आला आहे. या सर्व साहित्यप्रकारांतील आशय

आणि भाषा यांमधील वैविध्य मराठी भाषेचे शब्दवैभव विविधांगी आहे हे लक्षात आणून देईल. जीवनमूल्ये, जीवन कौशल्य विकसित होण्यासाठी या साहित्यकृतीची मदत होईलच, परंतु त्याबरोबर विचारक्षमता ,अभिव्यक्ती कौशल्ये आणि सृजनशिलता यांच्या विकासासाठी उपयुक्त होईल.

उद्दिष्टे

क्षमता क्षेत्रे	क्षमता विधान
श्रवण	१.विविध प्रसारमाध्यमांद्वारे प्रसारित होणाऱ्या चर्चा, संवाद ऐकून त्यांमधील सत्यता पडताळून पाहून त्याबाबत स्वतःचे मत निश्चित करता येणे. २.सार्वजनिक ठिकाणी ऐकलेल्या सूचनानुसार आपल्याशी संबंधित असलेल्या सूचना लक्षात घेणे. ३.औपचारिक व अनचौपचारिक संवाद व संभाषण ऐकूण आपले विचार मांडता येणे. ४. विविध साहित्यांतील भावार्थ समजून घेता येणे. ५. विविध साहित्यप्रकारांच्या ध्वनिफिती ऐकून त्यातील स्वराघात , आरोह – अवरोह या वैशिष्ट्यांची जाण होणे. ६.परिसरात बोलल्या जाणाऱ्या विविध बोलीभाषा ऐकून त्यांच्या वैशिष्ट्यांनुसार तुलना करता येणे.
भाषण – संभाषण	१.विविध पद्यप्रकारांना चाली लावून त्यांचे सादरीकरण करता येणे. २.विषयानुरुप स्वतःचे स्वतंत्र विचार परखडपणे मांडता येणे. ३. विविध उपक्रमांचे नियोजन,आयोजन करुन त्यांत सक्रिय सहभाग घेता येणे. ४. प्रभावी भाषण – संभाषण कौशल्याची वैशिष्ट्ये समजून घेऊन त्यांचा योग्य वापर करता येणे.
वाचन	१. योग्य गतीने विरामचिन्हांची दखल घेऊन अर्थपूर्ण प्रकट वाचन करता येणे. २. विविध साहित्यप्रकारांचे समजपूर्वक वाचन करुन त्याचा आस्वाद घेता येणे. ३. संकेतस्थळावर उपलब्ध असणाऱ्या इ-साहित्याचे वाचन करुन आस्वाद घेता येणे. ४. आंतरजालावर उपलब्ध असलेल्या संकेतस्थळावरील माहितीचे वाचन करुन , त्या माहितीचा स्वयंअध्ययनासाठी उपयोग करता येणे. ५. सार्वजनिक ठिकाणच्या सूचना व माहिती चिकित्सकपणे वाचून पडताळून पाहता येणे.
लेखन	१. लेखन करताना शुध्दलेखनाच्या नियमाचे पालन करता येणे. २. वाचलेल्या साहित्याच्या आशयातील मध्यवर्ती विचारांचा,कल्पनांचा विस्तार करता येणे. ३. दिलेल्या विषयामध्ये स्वतःच्या विचारांची ,कल्पनांची भर घालून पुनर्लेखन करता येणे. ४. म्हणी,वाक्प्रचार,शब्दसमूह, सुभाषिते यांचा लेखनात प्रभावीपणे वापर करता येणे. ५. घटना, प्रसंग , स्वानुभव यांचे लेखन करता येणे. ६. पाठ्यपुस्तकात समाविष्ट असलेल्या उपयोजित लेखन घटकांवर लेखन करता येणे.

Marathi Curriculum (2025-26)

इयत्ता नववी

CLASS – IX – (CODE -009)

अ.क्र	पाठाचे नाव	लेखक/ कवीचे नाव
१	सर्वात्मका शिव सुंदरा (प्रार्थना)(केवळ वाचनासाठी)	कुसुमाग्रज
२	संतवाणी – अ. संत कृपा झाली	संत बहिणाबाई
३	बेटा मी ऐकतो आहे.	व.पु.काळे
४	जी.आय.पी रेल्वे	प्रबोधनकार ठाकरे
५	व्यायामाचे महत्व	राष्ट्रसंत तुकडोजी महाराज
६	ऑलिंपिक वर्तुळाचा गोफ	बाळ ज. पंडित
७	दिव्याच्या शोधामागचे दिव्य	डॉ. अनिल गोडबोले
९	उजाड उघडे माळरानही	ललिता गादगे
१०	कुलूप	श्री. कृ. कोल्हटकर
११	आभाळातल्या पाऊलवाटा	
१२	पुन्हा एकदा	प्रतिमा इंगोले
१३	तिफन (कविता)	विठ्ठल वाघ
१५	माझे शिक्षक आणि संस्कार	शंकरराव खरात
१६	शब्दांचा खेळ	हेलन केलर
	स्थूलवाचन	
१	व्हेनिस	रमेश मंत्री
२	विश्वकोश	
	व्याकरण : ➢ शब्दांच्या आठ जाती ➢ लिंग,वचन ➢ काळ,वाक्याचे प्रकार–आज्ञार्थी,विधानार्थी,उद्‌गारवाचक ,प्रश्नार्थक ➢ समानार्थी, विरुध्दार्थी शब्द ➢ समास–द्विगू, द्वंद्व–३ प्रकार,अव्ययीभाव.	
	वाचन व आकलन : ➢ एक अपठित गद्यांश (परिच्छेद)अंदाजे (**150 -200** शब्द) बहुपर्यायी , लघुत्तरी ➢ एक अपठित पद्यांश(कविता) अदांजे (**10 -12** ओळी) बहुपर्यायी , लघुत्तरी	
	लेखन : ➢ निबंध : आत्मवृत्त, कल्पनात्मक, वर्णनात्मक किंवा ➢ मुद्‌दयांवर आधारित गोष्ट (कथा) ➢ औपचारिक पत्र – मागणी , तक्रार (लिफाफा आवश्यक) ➢ जाहिरात लेखन	

Textbook Prescribed - अक्षरभारती इयत्ता नववी

महाराष्ट्र राज्य पाठ्यपुस्तक निर्मिती व अभ्यासक्रम संशोधन मंडळ, पुणे–४

Marathi Curriculum (2025-26)

इयत्ता दहावी

CLASS – X – (CODE -009)

अ.क्र	पाठाचे नाव	लेखक/ कवीचे नाव
१	तू बुध्दी दे (केवळ वाचनासाठी)	गुरु ठाकूर
२	संतवाणी – अ – अंकिला मी दास तुझा	संत नामदेव
३	शाल	रा.ग. जाधव
४	उपास	पु. ल. देशपांडे
५	दोन दिवस (कविता)	नारायण सुर्वे
६	चुडीवाला	जयश्री रुईकर
७	फूटप्रिंट्स	डॉ. प्रदीप आवटे
८	ऊर्जाशक्तीचा जागर	डॉ रघुनाथ माशेलकर
९	औक्षण (कविता)	इंदिरा संत
१०	रंग साहित्याचे	
१५	खरा नागरिक	सुहास बारटक्के
१६	स्वप्न करु साकार (कविता)	किशोर पाठक
	स्थूलवाचन	
१	मोठे होत असलेल्या मुलांनो	डॉ. अनिल काकोडकर
२	व्युत्पत्ती कोश	

व्याकरण :

- शब्दांच्या आठ जाती
- लिंग,वचन
- काळ
- वाक्याचे प्रकार–आज्ञार्थी, विधानार्थी,उद्‌गारवाचक ,प्रश्नार्थक
- समानार्थी, विरुध्दार्थी शब्द
- समास–द्विगू,द्वंद्व– ३ प्रकार,अव्ययीभाव.

वाचन व आकलन :

- एक अपठित गद्यांश (परिच्छेद)अंदाजे (**150 -200** शब्द) बहुपर्यायी , लघुत्तरी
- एक अपठित पद्यांश(कविता) अदांजे (**10 -12** ओळी) बहुपर्यायी , लघुत्तरी

लेखन :

- निबंध : आत्मवृत्त, कल्पनात्मक, वर्णनात्मक
  किंवा
- मुद्‌दयांवर आधारित गोष्ट (कथा)
- औपचारिक पत्र – मागणी , तक्रार (लिफाफा आवश्यक)
- जाहिरात लेखन

Textbook Prescribed - अक्षरभारती इयत्ता दहावी

महाराष्ट्र राज्य पाठ्यपुस्तक निर्मिती व अभ्यासक्रम संशोधन मंडळ, पुणे–४

Paper Pattern 2025-26

विभाग –अ – गुण **15**				
घटक Unit	उपघटक आणि विवरण Sub-Unit & Description	**प्रश्न** प्रकार	प्रश्न संख्या	प्रतिप्रश्न गुण व एकूण गुण Total Marks
विभाग –अ वाचन व आकलन अपठित गद्य	एक अपठित गद्यांश (परिच्छेद) अंदाजे (150 - 200 शब्द)	बहुपर्यायी (mcq) (6 पैकी 5)	**5**	**5x1=5**
		लघुत्तरी (saq) (4 पैकी 3)	**3**	**3x1=3**
	एक अपठित पद्यांश (कविता) अंदाजे 10 -12 ओळी) साध्या सोप्या मराठी भाषेतील द्वितीय भाषेनुसार काठीण्यपातळी असलेली	बहुपर्यायी (mcq) (5 पैकी 4)	**4**	**4x1=4**
		लघुत्तरी (saq) (5 पैकी 3)	**3**	**3x1=3**
विभाग – ब – गुण **20**				
व्याकरण	शब्दांच्या जाती	बहुपर्यायी (mcq) (5 पैकी 4)	**4**	**4x1=4**
	काळ ओळखा व बदला	लघुत्तरी (saq) (4 पैकी 3)	**3**	**3x1=3**
	वाक्याचे प्रकार– (आज्ञार्थी,विधानार्थी २ प्रकार, उद्गारवाचक, प्रश्नार्थक)	लघुत्तरी (saq) (4 पैकी 3)	**3**	**3x1=3**
	वचन– बदला (पाठयपुस्तक आधारित)	लघुत्तरी (vsa) (3 पैकी 2)	**2**	**2x1=2**
	लिंग–बदला – (पाठयपुस्तक आधारित)	बहुपर्यायी (mcq) (3 पैकी 2)	**2**	**2x1=2**
	समानार्थी शब्द– (पाठयपुस्तक आधारित)	बहुपर्यायी (mcq) (3 पैकी 2)	**2**	**2x1=2**
	विरुध्दार्थी शब्द– (पाठयपुस्तक आधारित)	बहुपर्यायी (mcq) (3 पैकी 2)	**2**	**2x1=2**
	समास ओळखा – (द्विगू,द्वंद्व –३ प्रकार, अव्ययीभाव)	बहुपर्यायी (mcq) (3 पैकी 2)	**2**	**2x1=2**
विभाग – क – गुण **30** पाठ्यपुस्तकावर आधारित				
पाठ्यपुस्तक गद्य	अ) एका वाक्यात उत्तरे लिहा	लघुत्तरी (vsa) (5पैकी 3)	**3**	**3x1=3**
	ब) रिकाम्या जागी योग्य शब्द लिहा.	बहुपर्यायी (mcq) (5 पैकी 3)	**3**	**3x1=3**
	क) खालील प्रश्नांची थोडक्यात उत्तरे लिहा.	दीर्घोत्तरी (3 पैकी 1)	**1**	**1x3=3**

	(30-40 शब्द) उत्तर लिहिण्यापूर्वी प्रस्तावना आवश्यक.			
	ड) वाक्प्रचारः (वाक्यातील वाक्यप्रचार व कंसातील वाक्प्रचार अर्थानुसार जोडया जुळवा) (पाठ्यपुस्तक आधारित)	लघुत्तरी (saq) (5)	**5**	**5x1=5**
पद्य (कविता)	अ) एका वाक्यात उत्तरे लिहा	लघुत्तरी (vsa) (6 पैकी 4)	**4**	**4x1=4**
	ब) रिकाम्या जागी योग्य शब्द लिहा.	बहुपर्यायी (mcq) (5 पैकी 4)	**4**	**4x1=4**
	क) संदर्भासहित स्पष्टीकरण लिहा. (वैशिष्टये आवश्यक)	दीर्घोत्तरी (2 पैकी 1)	**1**	**1x3=3**
स्थूलवाचन **Supplimentary Reader**	अ) एका वाक्यात उत्तरे लिहा	लघुत्तरी (7 पैकी 5)	**5**	**5x1=5**

विभाग –ड – गुण **15** लेखन				
लेखन	निबंध लेखन– आत्मवृत्त /कल्पनात्मक/वर्णनात्मक (120-150 शब्द) किंवा मुद्द्यावर आधारित गोष्ट (कथालेखन)लिहा. (शीर्षक आणि तात्पर्य आवश्यक) (120-150 शब्द)	विस्तारात्मक लेखन (3 पैकी 1) किंवा (2 पैकी 1) (वरील 5 पैकी कोणतेही 1)	**1**	**1x5=5**
	औपचारिक पत्र लेखन (मागणी–तक्रार) (लिफाफा आवश्यक)	विस्तारात्मक लेखन (2 पैकी 1)	**1**	**1x5=5**
	जाहिरात लेखन	प्रेरणात्मक लेखन / कलात्मक लेखन (2 पैकी 1)	**1**	**1x5=5**

Internal exam : 20 Marks

Based on student's timely record submission, and assessment.

Notebook records (Question / Answers, Creative writing, etc.)

Homework, Classwork , Periodic test, Subject Enrichment /Portfolio

Test book Prescribed - अक्षरभारती इयत्ता दहावी

महाराष्ट्र राज्य पाठ्यपुस्तक निर्मिती व अभ्यासक्रम संशोधन मंडळ, पुणे–४

द्वितीय भाषा के रूप में हिंदी
विषय कोड – 085
कक्षा 9वीं – 10वीं (2025-26)

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

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

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

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

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 ज़रिए 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।
- सामाजिक मुद्दों पर समझ बनाना। (जाति, लिंग तथा आर्थिक विषमता)
- कविता, कहानी तथा घटनाओं को रोचक ढंग से लिखना ।
- भाषा एवं साहित्य को समझने एवं आत्मसात करने की दक्षता का विकास।

शिक्षण युक्तियाँ

- द्वितीय भाषा के रूप में पढ़ाई जा रही हिंदी भाषा का स्तर ऐसा होना चाहिए कि उसकी 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 तेज़ी 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 ज़रूरी होगा कि किताबों में आए काव्यांशों की लयबद्ध प्रस्तुतियों के ऑडियो-वीडियो कैसेट तैयार किए जाएँ। अगर आसानी से कोई **गायक/गायिका** मिले तो कक्षा में मध्यकालीन साहित्य के अध्यापन-शिक्षण में उससे मदद ली जानी चाहिए।
- एनसीईआरटी द्वारा तैयार किए गए **अधिगम प्रतिफल** /सीखने-सिखाने की प्रक्रिया जो इस पाठ्यचर्या के साथ संलग्नक के रूप में उपलब्ध है, को शिक्षक द्वारा क्षमता आधारित शिक्षा का लक्ष्य प्राप्त करने के लिये अनिवार्य रूप से इस्तेमाल करने की आवश्यकता है।
- मानव संसाधन विकास मंत्रालय के विभिन्न संगठनों तथा स्वतंत्र निर्माताओं द्वारा उपलब्ध कराए गए अन्य कार्यक्रम/ई-सामग्री/ वृत्तचित्रों और सिनेमा को शिक्षण-सामग्री के तौर पर इस्तेमाल करने की ज़रूरत है। इनके प्रदर्शन के क्रम में इन पर लगातार बातचीत के ज़रिए **सिनेमा के माध्यम से भाषा के प्रयोग** की विशिष्टता की पहचान कराई जा सकती है और हिंदी की अलग-अलग छटा दिखाई जा सकती है।
- कक्षा में सिर्फ़ एक पाठ्यपुस्तक की उपस्थिति से बेहतर होगा कि शिक्षक के हाथ में विभिन्न प्रकार 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, भाषा आदि) के प्रति सकारात्मक और संवेदनशील वातावरण निर्मित करना चाहिए।

श्रवण (सुनने) और वाचन (बोलने) की योग्यताएँ

- प्रवाह के साथ बोली जाती हुई हिंदी को अर्थबोध के साथ समझना।
- हिंदी शब्दों का उचित 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।
- अभिनय में भाग लेना।

श्रवण तथा वाचन परीक्षा हेतु दिशा-निर्देश

- **श्रवण (सुनना) (2.5 अंक)**: वर्णित या पठित सामग्री को सुनकर अर्थग्रहण करना, वार्तालाप करना, वाद-विवाद, भाषण, कविता पाठ आदि को सुनकर समझना, विश्लेषण करना, मूल्यांकन करना और तद्नुसार अभिव्यक्ति के ढंग को समझना।
- **वाचन (बोलना) (2.5 अंक)**: भाषण, सस्वर कविता-पाठ, वार्तालाप और उसकी औपचारिकता, कार्यक्रम-प्रस्तुति, कथा-कहानी अथवा घटना सुनाना, परिचय देना, भावानुकूल संवाद-वाचन।

श्रवण (सुनना) एवं वाचन (बोलना) कौशल:

- परीक्षक किसी प्रासंगिक विषय पर एक अनुच्छेद का स्पष्ट वाचन करेगा। अनुच्छेद तथ्यात्मक या सुझावात्मक हो सकता है। अनुच्छेद लगभग 120 शब्दों का होना चाहिए।

या

- परीक्षक 1-1.5 मिनट का श्रव्य अंश (ऑडियो क्लिप) सुनवाएगा। अंश रोचक होना चाहिए। कथ्य/ घटना पूर्ण एवं स्पष्ट होनी चाहिए। वाचक का उच्चारण शुद्ध, स्पष्ट एवं विराम चिह्नों के उचित प्रयोग सहित होना चाहिए।
- परीक्षार्थी ध्यानपूर्वक परीक्षक/ऑडियो क्लिप को सुनने के पश्चात परीक्षक द्वारा पूछे गए प्रश्नों का अपनी समझ से मौखिक अथवा कार्यपत्रक के माध्यम से उत्तर देंगे।

कौशलों के अंतरण का मूल्यांकन

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

	श्रवण (सुनना)		वाचन (बोलना)
1	परिचित संदर्भों में प्रयुक्त शब्दों और पदों को समझने की सामान्य योग्यता है।	1	केवल अलग-अलग शब्दों और पदों के प्रयोग की योग्यता प्रदर्शित करता है।
2	छोटे सुसंबद्ध कथनों को परिचित संदर्भों में समझने की योग्यता है।	2	परिचित संदर्भों में शुद्धता से केवल छोटे संबद्ध कथनों का सीमित प्रयोग करता है।
3	परिचित या अपरिचित दोनों संदर्भों में कथित सूचना को स्पष्ट समझने की योग्यता है।	3	अपेक्षाकृत दीर्घ भाषण में जटिल कथनों के प्रयोग की योग्यता प्रदर्शित करता है।
4	दीर्घ कथनों 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 करता है।
5	जटिल कथनों के विचार-बिंदुओं को समझने और विश्लेषित करने की योग्यता प्रदर्शित करने की क्षमता 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 मत व्यक्त करना।
- संदर्भ साहित्य को पढ़कर अपने काम के लायक सूचना एकत्र करना।
- पठित सामग्री के विभिन्न अंशों का परस्पर संबंध समझना।
- पठित वस्तु का सारांश तैयार करना।
- भाषा, विचार एवं शैली की सराहना करना।
- साहित्य के प्रति अभिरुचि का विकास करना।

लिखने की योग्यताएँ

- लिखते हुए व्याकरण-सम्मत भाषा का प्रयोग करना।
- हिंदी के परिचित और अपरिचित शब्दों की सही वर्तनी लिखना।
- विराम चिह्नों का समुचित प्रयोग करना।
- लेखन के लिए सक्रिय (व्यवहारोपयोगी) शब्द भंडार की वृद्धि करना।
- प्रभावपूर्ण भाषा तथा लेखन-शैली का स्वाभाविक रूप से प्रयोग करना।
- उपयुक्त अनुच्छेदों में बाँटकर लिखना।

- प्रार्थना पत्र, निमंत्रण पत्र, बधाई पत्र, संवेदना पत्र, आदेश पत्र, ईमेल, एस.एम.एस आदि लिखना और विविध प्रपत्रों को भरना।
- विविध स्रोतों से आवश्यक सामग्री एकत्र कर एक अभीष्ट विषय पर अनुछेद लिखना।
- देखी हुई घटनाओं का वर्णन करना और उन पर अपनी प्रतिक्रिया प्रकट करना।
- पढ़ी हुई कहानी को संवाद में तथा संवाद को कहानी में परिवर्तित करना।
- समारोह और गोष्ठियों की सूचना और प्रतिवेदन तैयार करना।
- लिखने में सृजनात्मकता लाना।
- अनावश्यक काट-छाँट से बचते हुए सुपाठ्य लेखन कार्य करना
- दो भिन्न पाठों की पाठ्यवस्तु पर चिंतन करके उनके मध्य की संबद्धता (अंतर्संबंधों) पर अपने विचार अभिव्यक्त करने में सक्षम होना।
- रटे-रटाए वाक्यों के स्थान पर अभिव्यक्तिपरक/ स्थिति आधारित/ उच्च चिंतन क्षमता वाले प्रश्नों पर सहजता से अपने मौलिक विचार प्रकट करना।

रचनात्मक अभिव्यक्ति

अनुच्छेद लेखन

- **पूर्णता** – संबंधित विषय के सभी पक्षों को अनुच्छेद के सीमित आकार में संयोजित करना।
- **क्रमबद्धता**– विचारों को क्रमबद्ध एवं तर्कसंगत विधि से प्रकट करना।
- **विषय-केंद्रित** – प्रारंभ से अंत तक अनुच्छेद का एक सूत्र में बँधा होना।
- **सामासिकता** – अनावश्यक विस्तार न देकर सीमित शब्दों में यथासंभव विषय संबद्ध पूरी बात कहने का प्रयास करना।

पत्र लेखन

- अनौपचारिक पत्र द्वारा पारस्परिक संबंधों मैत्रीपूर्ण भावों को व्यक्त करने हेतु सरल, संक्षिप्त लेखन शैली का विकास।
- औपचारिक पत्रों द्वारा दैनंदिनी जीवन की विभिन्न स्थितियों में कार्य, व्यापार, संवाद, परामर्श, अनुरोध तथा सुझाव के लिए प्रभावी एवं स्पष्ट संप्रेषण क्षमता का विकास।
- सरल और बोलचाल की भाषा शैली, उपयुक्त, सटीक शब्दों के प्रयोग, सीधे-सादे ढंग से स्पष्ट और प्रत्यक्ष बात की प्रस्तुति।
- प्रारूप की आवश्यक औपचारिकताओं के साथ सुस्पष्ट, सुलझे और क्रमबद्ध विचार आवश्यक;तथ्य, संक्षिप्तता और संपूर्णता के साथ प्रभावी प्रस्तुति।

विज्ञापन लेखन

(विज्ञापित वस्तु / विषय को केंद्र में रखते हुए)

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

चित्र-वर्णन

(चित्र में दिखाई दे रहे दृश्य /घटना को कल्पनाशक्ति से अपने शब्दों में लिखना)

- परिवेश की समझ
- सूक्ष्म विवरणों पर ध्यान
- दृश्यानुकूल भाषा
- क्रमबद्धता और तारतम्यता
- प्रभावशाली अभिव्यक्ति

संवाद लेखन

(दी गई परिस्थितियों के आधार पर संवाद लेखन)

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

सूचना लेखन

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

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

ई-मेल लेखन

(विविध विषयों पर आधारित औपचारिक ई-मेल लेखन)

- सरल, शिष्ट व बोधगम्य भाषा
- विषय से संबद्धता
- संक्षिप्त कलेवर, किंतु विषयगत संपूर्ण जानकारी
- व्यावहारिक/कार्यालयी शिष्टाचार व औपचारिकताओं का निर्वाह

लघुकथा लेखन

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

- निरंतरता
- कथात्मकता
- प्रभावी संवाद/पात्रानुकूल संवाद
- रचनात्मकता, कल्पनाशक्ति का उपयोग
- जिज्ञासा/रोचकता
- उद्देश्य केंद्रीयता

हिंदी पाठ्यक्रम –ब

विषय कोड – 085

कक्षा 9वीं (2025–26)

परीक्षा हेतु पाठ्यक्रम विनिर्देशन

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

- **भारांक–{80 (वार्षिक परीक्षा) + 20 (आंतरिक परीक्षा)**

निर्धारित समय– 3 घंटे **भारांक–80**

वार्षिक बोर्ड परीक्षा हेतु भार विभाजन				
खंड – क (अपठित बोध)				
	विषयवस्तु		**उपभार**	**कुल भार**
1	अपठित गद्यांश पर बोध, चिंतन, विश्लेषण, सराहना आदि पर बहुविकल्पीय, अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न			14
	i	दो अपठित गद्यांश लगभग 200 शब्दों के । एक अंकीय तीन बहुविकल्पी प्रश्न (1x3=3) पूछे जाएँगे अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न (2×2=4) पूछे जाएँगे	7+7	
	खंड – ख (व्यावहारिक व्याकरण)			
2	व्याकरण के लिए निर्धारित विषयों पर विषयवस्तु का बोध, भाषिक बिंदु/ संरचना आदि पर अतिलघूत्तरात्मक प्रश्न | (1x16) कुल 20 प्रश्न पूछे जाएँगे, जिनमें से केवल 16 प्रश्नों के उत्तर देने होंगे |			16
	i	शब्द और पद (2 अंक) (1×2=2) (3 में से 2 प्रश्न)	2	
	ii	अनुस्वार (1 अंक), अनुनासिक (1 अंक) (3 में से 2 प्रश्न)	2	
	iii	उपसर्ग (2 अंक), प्रत्यय (2 अंक) (5 में से 4 प्रश्न)	4	
	iv	स्वर संधि (3 अंक) (4 में से 3 प्रश्न)	3	

	v		विराम चिह्न (2 अंक) (3 में से 2 प्रश्न)	2	
	vi		अर्थ की दृष्टि से वाक्य भेद (3 अंक) (4 में से 3 प्रश्न)	3	
3	**खंड – ग (पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक)**				
	अ		**गद्य खंड (पाठ्यपुस्तक)**	11	
		1	स्पर्श (भाग-1) से निर्धारित पाठों में से गद्यांश के आधार पर विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति आदि पर एक अंकीय पाँच **बहुविकल्पीय** प्रश्न पूछे जाएँगे। (1x5)	5	
		2	स्पर्श (भाग-1) से निर्धारित पाठों में से विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति आदि पर तीन प्रश्न पूछे जाएँगे (25-30 शब्द-सीमा) (विकल्प सहित 4 में से 3 प्रश्न करने होंगे) (2x3)	6	
	ब		**काव्य खंड (पाठ्यपुस्तक)**	11	30
		1	स्पर्श (भाग-1) से निर्धारित कविताओं में से काव्यांश के आधार पर एक अंकीय पाँच **बहुविकल्पीय** प्रश्न पूछे जाएँगे (1x5)	5	
		2	स्पर्श (भाग-1) से निर्धारित कविताओं के आधार पर विद्यार्थियों का काव्यबोध परखने हेतु तीन प्रश्न पूछे जाएँगे (25-30 शब्द-सीमा)। (विकल्प सहित 4 में से 3 प्रश्न करने होंगे) (2x3)	6	
	स		**पूरक पाठ्यपुस्तक कृतिका भाग – 1**	8	
			संचयन (भाग-1) से निर्धारित पाठों पर आधारित दो प्रश्न पूछे जाएँगे (50-60 शब्द-सीमा)। (विकल्प सहित 3 में से 2 प्रश्न करने होंगे) (4x2)	8	
	खंड – घ (रचनात्मक लेखन)				
2	**लेखन**				
	क		विभिन्न विषयों और संदर्भों पर विद्यार्थियों के तर्कसंगत विचार प्रकट करने की क्षमता को परखने के लिए संकेत-बिंदुओं पर आधारित समसामयिक एवं व्यावहारिक जीवन से जुड़े हुए तीन विषयों में से किसी एक विषय पर लगभग 120 शब्दों में अनुच्छेद लेखन (5×1)	5	20
	ख		अभिव्यक्ति की क्षमता पर केंद्रित अनौपचारिक विषयों में लगभग 100 शब्दों में किसी एक विषय पर पत्र। (5x1)	5	
	ग		किसी दृश्य/घटना के चित्र पर आधारित लेखन (5x1) (लगभग 100 शब्दों में) (बिना किसी विकल्प के)	5	

	घ	भाव एवं दृश्य संकेतो के आधार पर संवाद लेखन (लगभग 100 शब्दों में) (5x1) (विकल्प सहित)	5	
		कुल		**80**
		आंतरिक मूल्यांकन		20
	अ	**सामयिक आकलन**	5	
	ब	**बहुविध आकलन**	5	
	स	**पोर्टफ़ोलियो**	5	
	द	**श्रवण एवं वाचन**	5	
		कुल		**100**

निर्धारित पुस्तकें:

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

❖ नोट : निम्नलिखित पाठों से प्रश्न नहीं पूछे जाएँगे–

स्पर्श (भाग –1)	• धर्म की आड़ (पूरा पाठ) • आदमीनामा (पूरा पाठ) • एक फूल की चाह (पूरा पाठ)
संचयन (भाग–1)	• हामिद खाँ (पूरा पाठ) • दिये जल उठे (पूरा पाठ)

हिंदी पाठ्यक्रम –ब

विषय कोड – 085

कक्षा 10वीं (2025–26)

परीक्षा हेतु पाठ्यक्रम विनिर्देशन

खंड		भारांक
क	**अपठित बोध**	**14**
ख	**व्यावहारिक व्याकरण**	**16**
ग	**पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक**	**28**
घ	**रचनात्मक लेखन**	**22**

- **भारांक- 80 (वार्षिक बोर्ड परीक्षा)+20 (आंतरिक परीक्षा)**

निर्धारित समय- 3 घंटे **भारांक-80**

वार्षिक बोर्ड परीक्षा हेतु भार विभाजन				
खंड – क (बहुविकल्पी प्रश्न)				
	विषयवस्तु		**उप भार**	**कुल भार**
1	अपठित गद्यांश पर बोध, चिंतन, विश्लेषण, सराहना आदि पर बहुविकल्पीय, अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न			14
	अ	दो अपठित गद्यांश लगभग 200 शब्दों के । एक अंकीय तीन बहुविकल्पी प्रश्न (1x3=3) पूछे जाएँगे अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्न (2×2=4) पूछे जाएँगे	7+7	
		खंड – ख (व्यावहारिक व्याकरण)		
2	व्याकरण के लिए निर्धारित विषयों पर विषयवस्तु का बोध, भाषिक बिंदु/ संरचना आदि पर अतिलघूत्तरात्मक/लघूत्तरात्मक प्रश्न। (1x16) (कुल 20 प्रश्न पूछे जाएँगे, जिनमें से केवल 16 प्रश्नों के उत्तर देने होंगे)			16
	1	पदबंध (1x4=4) (5 में से 4 प्रश्न करने होंगे)	4	
	2	रचना के आधार पर वाक्य रूपांतरण (1x4=4) (5 में से 4 प्रश्न करने होंगे)	4	
	3	समास (1x4=4) (5 में से 4 प्रश्न करने होंगे)	4	
	4	मुहावरे (1x4=4) (5 में से 4 प्रश्न करने होंगे)	4	
3	**खंड – ग (पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक)**			

	अ	**गद्य खंड (पाठ्यपुस्तक)**		11	
		1	स्पर्श (भाग-2) से निर्धारित पाठों में से गद्यांश के आधार पर विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति आदि पर एक अंकीय पाँच **बहुविकल्पी** प्रश्न पूछे जाएँगे। (1x5)	5	
		2	स्पर्श (भाग-2) से निर्धारित पाठों में से विषयवस्तु का ज्ञान, बोध, अभिव्यक्ति आदि पर तीन प्रश्न पूछे जाएँगे।(विकल्प सहित- 25-30 शब्द-सीमा वाले 4 में से 3 प्रश्न करने होंगे) (2x3)	6	
	ब		**काव्य खंड (पाठ्यपुस्तक)**	11	
		1	स्पर्श (भाग-2) से निर्धारित कविताओं में से काव्यांश के आधार पर एक अंकीय पाँच **बहुविकल्पी** प्रश्न पूछे जाएँगे (1x5)	5	28
		2	स्पर्श (भाग-2) से निर्धारित कविताओं के आधार पर विद्यार्थियों का काव्यबोध परखने हेतु तीन प्रश्न पूछे जाएँगे। (विकल्प सहित-25-30 शब्द-सीमा वाले 4 में से 3 प्रश्न करने होंगे) (2x3)	6	
	स		**पूरक पाठ्यपुस्तक संचयन भाग – 2**	6	
			संचयन (भाग-2) से निर्धारित पाठों पर आधारित दो प्रश्न पूछे जाएँगे। (3x2) (विकल्प सहित-50-60 शब्द-सीमा वाले 3 में से 2 प्रश्न करने होंगे)	6	
	खंड – घ (रचनात्मक लेखन)				
	i	विभिन्न विषयों और संदर्भो पर विद्यार्थियों के तर्कसंगत विचार प्रकट करने की क्षमता को परखने के लिए संकेत-बिंदुओं पर आधारित समसामयिक एवं व्यावहारिक जीवन से जुड़े हुए तीन विषयों में से किसी एक विषय पर लगभग 120 शब्दों में अनुच्छेद लेखन (5×1)		5	22
	ii	अभिव्यक्ति की क्षमता पर केंद्रित औपचारिक विषयों में से किसी एक विषय पर लगभग 100 शब्दों में पत्र (विकल्प सहित) (5×1)		5	
	iii	व्यावहारिक जीवन से संबंधित विषयों पर आधारित लगभग 60 शब्दों में सूचना लेखन। (विकल्प सहित) (4×1)		4	
	iv	विषय से संबंधित लगभग 40 शब्दों के अंतर्गत विज्ञापन लेखन (विकल्प सहित) (3×1)		3	
	v	विविध विषयों पर आधारित लगभग 80 शब्दों में ई-मेल लेखन (5×1) अथवा		5	

		दिए गए विषय/शीर्षक आदि के आधार पर लगभग 100 शब्दों में लघुकथा लेखन (5×1)		
		कुल		**80**
		आंतरिक मूल्यांकन	**अंक**	20
	अ	**सामयिक आकलन**	5	
	ब	**बहुविध आकलन**	5	
	स	**पोर्टफ़ोलियो**	5	
	द	**श्रवण एवं वाचन**	5	
		कुल		**100**

निर्धारित पुस्तकें:

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

❖ नोट : निम्नलिखित पाठों से प्रश्न नहीं पूछे जाएँगे।

पाठ्य पुस्तक स्पर्श, भाग–2

बिहारी–दोहे (पूरा पाठ)

महादेवी वर्मा– मधुर–मधुर मेरे दीपक जल (पूरा पाठ)

अंतोन चेखव– गिरगिट (पूरा पाठ)

पूरक पुस्तक संचयन, भाग–2

पुस्तक में कोई परिवर्तन नहीं। कोई भी पाठ नहीं हटाया गया है।

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

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Mathematics

Subject Code – 041

Classes XI-XII (2025 – 26)

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. Senior Secondary stage is a launching stage from where the students go either for higher academic education in Mathematics or for professional courses like Engineering, Physical and Biological science, Commerce or Computer Applications. The present revised syllabus has been designed in accordance with National Curriculum Framework 2005 and as per guidelines given in Focus Group on Teaching of Mathematics 2005 which is to meet the emerging needs of all categories of students. Motivating the topics from real life situations and other subject areas, greater emphasis has been laid on application of various concepts.

Objectives

The broad objectives of teaching Mathematics at senior school stage intend to help the students:

- to acquire knowledge and critical understanding, particularly by way of motivation and visualization, of basic concepts, terms, principles, symbols and mastery of underlying processes and skills.
- to feel the flow of reasons while proving a result or solving a problem.
- to apply the knowledge and skills acquired to solve problems and wherever possible, by more than one method.
- to develop positive attitude to think, analyze and articulate logically.
- 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.
- 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 reverence and respect towards great Mathematicians for their contributions to the field of Mathematics.

COURSE STRUCTURE

CLASS XI (2025-26)

Three Hours **Max Marks: 80**

No.	Units	Marks
I.	Sets and Functions	23
II.	Algebra	25
III.	Coordinate Geometry	12
IV.	Calculus	08
V.	Statistics and Probability	12
	Total	**80**
	Internal Assessment	**20**

*No chapter/unit-wise weightage. Care to be taken to cover all the chapters.

Unit-I: Sets and Functions

1. Sets

Sets and their representations, Empty set, Finite and Infinite sets, Equal sets, Subsets, Subsets of a set of real numbers especially intervals (with notations). Universal set. Venn diagrams. Union and Intersection of sets. Difference of sets. Complement of a set. Properties of Complement.

2. Relations & Functions

Ordered pairs. Cartesian product of sets. Number of elements in the Cartesian product of two finite sets. Cartesian product of the set of reals with itself (up to R x R x R). Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function as a special type of relation. Pictorial representation of a function, domain, co-domain and range of a function. Real valued functions, domain and range of these functions, constant, identity, polynomial, rational, modulus, signum, exponential, logarithmic and greatest integer functions, with their graphs. Sum, difference, product and quotients of functions.

3. Trigonometric Functions

Positive and negative angles. Measuring angles in radians and in degrees and conversion from one measure to another. Definition of trigonometric functions with the help of unit circle. Truth of the identity $sin^2x + cos^2x = 1$, for all x. Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing $sin\,(x \pm y)$ and $cos\,(x \pm y)$ in terms of $sinx,\ siny, cosx$ & $cosy$ and their simple applications. Deducing identities like the following:

$\tan(x \pm y) = \frac{\tan x \pm \tan y}{1 \mp \tan x \tan y}, \cot(x \pm y) = \frac{\cot x \mp \cot y}{\cot y \pm \cot x}$

$\sin \alpha \pm \sin \beta = 2 \sin \frac{1}{2}(\alpha \pm \beta) \cos \frac{1}{2}(\alpha \mp \beta)$

$\cos \alpha + \cos \beta = 2 \cos \frac{1}{2}(\alpha + \beta) \cos \frac{1}{2}(\alpha - \beta)$

$\cos \alpha - \cos \beta = -2 \sin \frac{1}{2}(\alpha + \beta) \sin \frac{1}{2}(\alpha - \beta)$

Identities related to $\sin 2x$, $\cos 2x$, $\tan 2x$, $\sin 3x$, $\cos 3x$ and $\tan 3x$.

Unit-II: Algebra

1. Complex Numbers and Quadratic Equations

Need for complex numbers, especially $\sqrt{-1}$, to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers. Argand plane.

2. Linear Inequalities

Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line.

3. Permutations and Combinations

Fundamental principle of counting. Factorial *n.* (n!) Permutations and combinations, derivation of Formulae for ${}^{n}P_{r}$, ${}^{n}C_{r}$ and their connections, simple applications.

4. Binomial Theorem

Historical perspective, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, simple applications.

5. Sequence and Series

Sequence and Series. Arithmetic Mean (A.M.) Geometric Progression (G.P.), general term of a G.P., sum of *n* terms of a G.P., infinite G.P. and its sum, geometric mean (G.M.), relation between A.M. and G.M

Unit-III: Coordinate Geometry

1. Straight Lines

Brief recall of two-dimensional geometry from earlier classes. Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point -slope form, slope-intercept form, two-point form, intercept form. Distance of a point from a line.

2. Conic Sections

Sections of a cone: circles, ellipse, parabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.

3. Introduction to Three-dimensional Geometry

Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points.

Unit-IV: Calculus

1. Limits and Derivatives

Derivative introduced as rate of change both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions trigonometric, exponential and logarithmic functions. Definition of derivative relate it to scope of tangent of the curve, derivative of sum, difference, product and quotient of functions of polynomial and trigonometric functions.

Unit-V Statistics and Probability

1. Statistics

Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/grouped data.

2. Probability

Events; occurrence of events, ‘not’, ‘and’ and ‘or’ events, exhaustive events, mutually exclusive events, Axiomatic (set theoretic) probability, connections with other theories of earlier classes. Probability of an event, probability of ‘not’, ‘and’ and ‘or’ events.

MATHEMATICS QUESTION PAPER DESIGN

CLASS – XI (2025-26)

Time: 3 hours **Max. Marks: 80**

S. No.	Typology of Questions	Total Marks	% Weightage
1	**Remembering:** Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers. **Understanding:** Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	44	55
2	**Applying:** Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	20	25
3	**Analysing:** Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations **Evaluating:** Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. **Creating:** Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions	16	20
	Total	**80**	**100**

1. *No chapter wise weightage. Care to be taken to cover all the chapters*
2. *Suitable internal variations may be made for generating various templates keeping the overall weightage to different form of questions and typology of questions same.*

Choice(s):

There will be no overall choice in the question paper. However, 33% internal choices will be given in all the sections

INTERNAL ASSESSMENT	**20 MARKS**
Periodic Tests (Best 2 out of 3 tests conducted)	10 Marks
Mathematics Activities	10 Marks

Note: Please refer the guidelines given under XII Mathematics Syllabus.

CLASS – XI (2025-26)

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

S.No.	Content
	Unit-I: Sets and Functions
1.	**Sets**
	Practical problems on Union and Intersection of two sets.
2.	**Relations and Functions**
	Composition of Functions
3.	**Trigonometric Functions**
	General solution of trigonometric equations of the type $\sin y = \sin a$, $\cos y = \cos a$ and $\tan y = \tan a$.
	Unit-II: Algebra
1.	**Principle of Mathematical Induction**
	Process of the proof by induction, motivating the application of the method by looking at natural numbers as the least inductive subset of real numbers. The principle of mathematical induction and simple applications.
2.	**(Complex Numbers and) Quadratic Equations**
	Polar representation of complex numbers. Statement of Fundamental Theorem of Algebra, solution of quadratic equations (with real coefficients) in the complex number system.
3.	**Linear Inequalities**
	Graphical solution of linear inequalities in two variables. Graphical method of finding a solution of system of linear inequalities in two variables.
4.	**Binomial Theorem**
	General and middle term in binomial expansion.
5.	**Sequence and Series**
	Formulae for the following special sums $\sum_{k=1}^{n} k$, $\sum_{k=1}^{n} k^2$, $\sum_{k=1}^{n} k^3$
	Unit-III: Coordinate Geometry
1.	**Straight Lines**
	Normal form. General equation of a line.
2.	**Introduction to Three-dimensional Geometry**
	Section formula.
	Unit-IV: Calculus
1.	**Limits and Derivatives**
	Derivatives of composite functions (Chain rule).
	Unit-V Statistics and Probability
1.	**Probability**
	Random experiments; outcomes, sample space (set representation).

COURSE STRUCTURE

CLASS – XII

(2025-26)

One Paper **Max. Marks: 80**

No.	Units	Marks
I.	Relations and Functions	08
II.	Algebra	10
III.	Calculus	35
IV.	Vectors and Three - Dimensional Geometry	14
V.	Linear Programming	05
VI.	Probability	08
	Total	**80**
	Internal Assessment	**20**

Unit-I: Relations and Functions

1. Relations and Functions

Types of relations: reflexive, symmetric, transitive and equivalence relations. One to one and onto functions.

2. Inverse Trigonometric Functions

Definition, range, domain, principal value branch. Graphs of inverse trigonometric functions.

Unit-II: Algebra

1. Matrices

Concept, notation, order, equality, types of matrices, zero and identity matrix, transpose of a matrix, symmetric and skew symmetric matrices. Operations on matrices: Addition and multiplication and multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. Non- commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order 2). Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries).

2. Determinants

Determinant of a square matrix (up to 3 x 3 matrices), minors, co-factors and applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of system of linear equations by examples, solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix.

Unit-III: Calculus

1. Continuity and Differentiability

Continuity and differentiability, chain rule, derivative of composite functions, derivatives of inverse trigonometric functions like $\sin^{-1} x$, $\cos^{-1} x$ and $\tan^{-1} x$, derivative of implicit functions. Concept of exponential and logarithmic functions. Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second order derivatives.

2. Applications of Derivatives

Applications of derivatives: rate of change of quantities, increasing/decreasing functions, maxima and minima (first derivative test motivated geometrically and second derivative test given as a provable tool). Simple problems (that illustrate basic principles and understanding of the subject as well as real- life situations).

3. Integrals

Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, Evaluation of simple integrals of the following types and problems based on them.

$$\int \frac{dx}{x^2 \pm a^2}, \int \frac{dx}{\sqrt{x^2 \pm a^2}}, \int \frac{dx}{\sqrt{a^2 - x^2}}, \int \frac{dx}{ax^2+bx+c}, \int \frac{dx}{\sqrt{ax^2+bx+c}}, \int \frac{px+q}{ax^2+bx+c}\,dx,$$

$$\int \frac{px+q}{\sqrt{ax^2+bx+c}}\,dx, \int \sqrt{a^2 \pm x^2}\,dx, \int \sqrt{x^2 - a^2}\,dx, \int \sqrt{ax^2+bx+c}\,dx$$

Fundamental Theorem of Calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals.

4. Application of the Integrals

Applications in finding the area under simple curves, especially lines, circles/ parabolas/ellipses (in standard form only)

5. Differential Equations

Definition, order and degree, general and particular solutions of a differential equation. Solution of differential equations by method of separation of variables, solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type:

$\frac{dy}{dx} + py = q$, where p and q are functions of x or constants.

$\frac{dx}{dy} + px = q$, where p and q are functions of y or constants.

Unit-IV: Vectors and Three-dimensional Geometry

1. Vectors

Vectors and scalars, magnitude and direction of a vector. Direction cosines and direction ratios of a vector. Types of vectors (equal, unit, zero, parallel and collinear vectors), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition, Geometrical Interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors.

2. Three-dimensional Geometry

Direction cosines and direction ratios of a line joining two points. Cartesian equation and vector equation of a line, skew lines, shortest distance between two lines. Angle between two lines.

Unit-V: Linear Programming Problem

1. Linear Programming

Introduction, related terminology such as constraints, objective function, optimization, graphical method of solution for problems in two variables, feasible and infeasible regions (bounded or unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).

Unit-VI: Probability

1. Probability

Conditional probability, multiplication theorem on probability, independent events, total probability, Bayes' theorem.

MATHEMATICS (Code No. – 041)

QUESTION PAPER DESIGN

CLASS – XII (2025-26)

Time: 3 hours **Max. Marks: 80**

S. No.	Typology of Questions	Total Marks	% Weightage
1	**Remembering:** Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers. **Understanding:** Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas	44	55
2	**Applying:** Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	20	25
3	**Analysing :** Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations **Evaluating:** Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria. **Creating:** Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions	16	20
	Total	**80**	**100**

1. *No chapter wise weightage. Care to be taken to cover all the chapters*
2. *Suitable internal variations may be made for generating various templates keeping the overall weightage to different form of questions and typology of questions same.*

Choice(s):

There will be no overall choice in the question paper. However, 33% internal choices will be given in all the sections

INTERNAL ASSESSMENT	**20 MARKS**
Periodic Tests (Best 2 out of 3 tests conducted)	10 Marks
Mathematics Activities	10 Marks

Note: For activities NCERT Lab Manual may be referred.

Conduct of Periodic Tests:

Periodic Test is a Pen and Paper assessment which is to be conducted by the respective subject teacher. The format of periodic test must have questions items with a balance mix, such as, very short answer (VSA), short answer (SA) and long answer (LA) to effectively assess the knowledge, understanding, application, skills, analysis, evaluation and synthesis. Depending on the nature of subject, the subject teacher will have the liberty of incorporating any other types of questions too. The modalities of the PT are as follows:

a) **Mode:** The periodic test is to be taken in the form of pen-paper test.

b) **Schedule:** In the entire Academic Year, three Periodic Tests in each subject may be conducted as follows:

Test	Pre-Mid-term (PT-I)	Mid-Term (PT-II)	Post Mid-Term (PT-III)
Tentative Month	July-August	November	December-January

This is only a suggestive schedule and schools may conduct periodic tests as per their convenience. The winter bound schools would develop their own schedule with similar time gaps between two consecutive tests.

c) **Average of Marks**: Once schools complete the conduct of all the three periodic tests, they will convert the weightage of each of the three tests into ten marks each for identifying best two tests. The best two will be taken into consideration and the average of the two shall be taken as the final marks for PT.

d) The school will ensure simple documentation to keep a record of performance as suggested in detail circular no. Acad-05/2017.

e) **Sharing of Feedback/Performance**: The students' achievement in each test must be shared with the students and their parents to give them an overview of the level of learning that has taken place during different periods. Feedback will help parents formulate interventions (conducive ambience, support materials, motivation and morale-boosting) to further enhance learning. A teacher, while sharing the feedback with student or parent, should be empathetic, non- judgmental and motivating. It is recommended that the teacher share best examples/performances of IA with the class to motivate all learners

Assessment of Activity Work:

Throughout the year any 10 activities shall be performed by the student from the activities given in the NCERT Laboratory Manual for the respective class (XI or XII) which is available on the link: http://www.ncert.nic.in/exemplar/labmanuals.html a record of the same may be kept by the student. An year end test on the activity may be conducted

The weightage are as under:

- The activities performed by the student throughout the year and record keeping: 5 marks
- Assessment of the activity performed during the year end test: 3 marks
- Viva-voce: 2 marks

Prescribed Books:

1) Mathematics Textbook for Class XI, NCERT Publications
2) Mathematics Part I - Textbook for Class XII, NCERT Publication
3) Mathematics Part II - Textbook for Class XII, NCERT Publication
4) Mathematics Exemplar Problem for Class XI, Published by NCERT
5) Mathematics Exemplar Problem for Class XII, Published by NCERT
6) Mathematics Lab Manual class XI, published by NCERT
7) Mathematics Lab Manual class XII, published by NCERT

ENGLISH CORE

Subject Code-301

Classes-XI- XII (2025-26)

Background

Students are expected to have acquired a reasonable degree of language proficiency in English Language by the time they come to class XI, and the course aims, essentially, at promoting the higher-order language skills.

For a large number of students, the higher secondary stage will be a preparation for the university, where a fairly high degree of proficiency in English may be required. Additionally, for another large group, the higher secondary stage may be a preparation for entry into the professional domain. The Core Course caters to both groups by promoting the language skills required for academic study as well as the language skills required for the workplace.

Competencies to be focused on:

The general objectives at this stage are to:

- listen and comprehend live as well as recorded oral presentations on a variety of topics
- develop greater confidence and proficiency in the use of language skills necessary for social and academic purpose to participate in group discussions and interviews, by making short oral presentation on given topics
- perceive the overall meaning and organisation of the text (i.e., correlation of the vital portions of the text)
- identify the central/main point and supporting details, etc., to build communicative competence in various lexicons of English
- promote advanced language skills with an aim to develop the skills of reasoning, drawing inferences, etc. through meaningful activities
- translate texts from mother tongue(s) into English and vice versa
- develop ability and acquire knowledge required in order to engage in independent reflection and enquiry
- read and comprehend extended texts (prescribed and non-prescribed) in the following genres: science fiction, drama, poetry, biography, autobiography, travel and sports literature, etc.
- text-based writing (i.e., writing in response to questions or tasks based on prescribed or unseen texts), understand and respond to lectures, speeches, etc.
- write expository / argumentative essays, explaining or developing a topic, arguing a case, etc, write formal/informal letters and applications for different purposes

- make use of contextual clues to infer meanings of unfamiliar vocabulary
- select, compile and collate information for an oral presentation
- produce unified paragraphs with adequate details and support
- use grammatical structures accurately and appropriately
- write items related to the workplace (minutes, memoranda, notices, summaries, reports etc.
- filling up of forms, preparing CV, e-mail messages., making notes from reference materials, recorded talks etc.

The core course should draw upon the language items suggested for class IX-X and delve deeper into their usage and functions. Particular attention may, however, be given to the following areas of grammar:

- The use of passive forms in scientific and innovative writings.
- Convert one kind of sentence/clause into a different kind of structure as well as other items to exemplify stylistic variations in different discourses modal auxiliaries- uses based on semantic considerations.

A. Specific Objectives of Reading

Students are expected to develop the following study skills:

- skim for main ideas and scan for details
- refer to dictionaries, encyclopedia, thesaurus and academic reference material in any format
- select and extract relevant information, using reading skills of skimming and scanning
- understand the writer's purpose and tone
- comprehend the difference between the literal and the figurative
- differentiate between claims and realities, facts and opinions, form business opinions on the basis of latest trends available
- comprehend technical language as required in computer related fields, arrive at personal conclusion and logically comment on a given text.
- Specifically develop the ability to be original and creative in interpreting opinion, develop the ability to be logically persuasive in defending one's opinion and making notes based on a text.
- recognize multilingual nature of Indian society by reading different genres.

Develop literary skills as enumerated below:

- respond to literary texts
- appreciate and analyse special features of languages that differentiate literary texts from non-literary ones, explore and evaluate features of character, plot, setting, etc.
- understand and appreciate the oral, mobile and visual elements of drama. Identify the elements of style such as humour, pathos, satire and irony, etc.
- make notes from various resources for the purpose of developing the extracted ideas into sustained pieces of writing

B. Listening and Speaking

Speaking needs a very strong emphasis and is an important objective leading to professional competence. Hence, testing of oral skills must be made an important component of the overall testing pattern. To this end, speaking and listening skills are overtly built into the material to guide the teachers in actualization of the skills.

Specific Objectives of Listening & Speaking

Students are expected to develop the ability to:

- take organized notes on lectures, talks and listening passages
- listen to news bulletins and to develop the ability to discuss informally a wide ranging issues like current national and international affairs, sports, business, etc.
- respond in interviews and to participate in formal group discussions.
- make enquiries meaningfully and adequately and to respond to enquiries for the purpose of travelling within the country and abroad.
- listen to business news and to be able to extract relevant important information.
- to develop public speaking skills.

C. Specific Objectives of Writing

The students will be able to:

- write letters to friends, relatives, etc. to write business and official letters.
- open accounts in post offices and banks. To fill in railway/airline reservation forms both online and offline.
- draft notices, advertisements and design posters effectively and appropriately
- write on various issues to institutions seeking relevant information, lodge complaints, express gratitude or render apology.
- write applications, fill in application forms, prepare a personal bio-data for admission into colleges, universities, entrance tests and jobs.
- write informal reports as part of personal letters on functions, programmes and activities held in school (morning assembly, annual day, sports day, etc.)
- write formal reports for school magazines/events/processes/ or in local newspapers about events or occasions.
- express opinions, facts, arguments in the form of speech or debates, using a variety of accurate sentence structures
- draft papers to be presented in symposia.
- take down notes from talks and lectures.
- write examination answers according to the requirement of various subjects.
- summarise a text.

Note: The creative writing section shall assess the prescribed competencies for writing skills, irrespective of any word limit.

D. More About Reading

Inculcating good reading habits in children has always been a concern for all stakeholders in education. The purpose is to create independent thinking individuals with the ability to not only create their own knowledge but also critically interpret, analyse and evaluate it with objectivity and fairness. This will also help students in learning and acquiring better language skills.

Creating learners for the 21st century involves making them independent learners who can learn, unlearn and relearn. If our children are in the habit of reading, they will learn to reinvent themselves and deal with the many challenges that lie ahead of them.

Reading is not merely decoding information or pronouncing words correctly. It is an interactive dialogue between the author and the reader in which the reader and the author share their experiences and knowledge with each other. Good readers are critical readers with an ability to arrive at a deeper understanding of not only the world presented in the book but also of the real world around them.

Consequently, they become independent thinkers capable of taking their own decisions in life rationally. Hence, a few activities are suggested below which teachers may use as a part of the reading project.

- Short review / dramatization of the story
- Commentary on the characters
- Critical evaluation of the plot, storyline and characters
- Comparing and contrasting the characters within the story, with other characters in stories by the same author or by different authors
- Extrapolating about the story read or life of characters after the story ends defending characters' actions in the story
- Making an audio story out of the novel/text to be read aloud.
- Interacting with the author
- Holding a literature fest where students role-play as various characters to interact with each other
- Role playing as authors/poets/dramatists, to defend their works and characters
- Symposiums and seminars for introducing a book, an author, or a theme
- Creating graphic novels out of novel or short stories they read
- Dramatizing incidents from a novel or a story
- Creating their own stories
- Books of one genre to be read by the whole class.

Teachers may select books and e-books suitable to the age and level of the learners. Care ought to be taken to choose books that are appropriate in terms of language, theme and content and which do not hurt the sensibilities of a child.

Teachers may later suggest books from other languages by dealing with the same themes as an extended activity. The Project should lead to independent learning/reading skills and hence the chosen book should not be taught in class, but may be introduced through activities and be left for the students to read at their own pace. Teachers may, however, choose to assess a student's progress or success in reading the book by asking for verbal or written progress reports, looking at their diary entries, engaging in a discussion about the book, giving a short quiz or a work sheet about the book/short story. A befitting mode of assessment may be chosen by the teacher.

Methods and Techniques

The techniques used for teaching should promote habits of self-learning and reduce dependence on the teacher. In general, we recommend a multi-skill, learner-centred, activity based approach, of which there can be many variations.

- The core classroom activity is likely to be that of silent reading of prescribed/selected texts for comprehension, which can lead to other forms of language learning activities such as role-play, dramatization, group discussion, writing, etc., although many such activities could be carried out without the preliminary use of textual material.
- It is important that students be trained to read independently and intelligently, interacting actively with texts, with the use of reference materials (dictionary, thesaurus, etc.) where necessary.
- Some pre-reading activity will generally be required, and the course books should suggest suitable activities, leaving teachers free to devise other activities when desired. So also, the reading of texts should be followed by post reading activities.
- It is important to remember that students should be encouraged to interpret texts in different ways.
- Group and pair activities can be resorted to, when desired, although many useful language activities can be carried out individually. In general, teachers should encourage students to interact actively with texts and with each other.
- Oral activity (group discussion, etc.) should be encouraged.

ENGLISH CORE

CLASS –XI (2025-26)

Section A
Reading Skills-- 26 Marks

I. Reading Comprehension through Unseen Passages **10+8=18 Marks**

1. One unseen passage to assess comprehension, interpretation, analysis, inference and vocabulary. The passage may be factual, descriptive or literary.
2. One unseen case-based factual passage with verbal/visual inputs like statistical data, charts etc.to assess comprehension, interpretation, analysis, inference and evaluation.

Note*: The combined word limit for both the passages will be 600-750*. Multiple Choice Questions / Objective Type Questions will be asked.

3. Note Making and Summarization based on a passage of approximately 200-250 words.

i.	Note Making:		5 Marks
	• Title:	1	
	• Numbering and indenting:	1	
	• Key/glossary:	1	
	• Notes:	2	
ii.	Summary (up to 50 words):		3 Marks
	• Content:	2	
	• Expression:	1	

Section B
Grammar and Creative Writing Skills– 23 Marks

II. Grammar **7 Marks**

4. Questions on Gap filling (Tenses, Clauses)
5. Questions on re-ordering/transformation of sentences

(Total seven questions to be done out of the eight given).

III. Creative Writing Skills **16 Marks**

6. Short writing task – Classified Advertisements, up to 50 words. One out of the two given questions to be answered (3 Marks: Format: 1 / Content: 1 / Expression: 1)

7. Short writing task –Poster up to 50 words. One out of the two given questions to be answered. (3 marks: Format: 1 / Content: 1 / Expression: 1)

8. Long Writing task: Speech in 120-150 words based on verbal / visual cues related to contemporary / age-appropriate topic. One out of the two given questions to be answered. (5 Marks: Format: 1 / Content: 2 / Expression: 2)

9. Long Writing Task: Debate based on visual/verbal inputs in 120-150 words, thematically related to contemporary, topical issues. One out of the two given questions to be answered. (5 Marks: Format: 1 / Content: 2 / Expression: 2)

Section C
Literature Text Book and Supplementary Reading Text-31 Marks

This section will have variety of assessment items including Multiple Choice Questions, Objective Type Questions, Short Answer Type Questions and Long Answer Type Questions to assess comprehension, interpretation, analysis, evaluation and extrapolation beyond the text.

10. One Poetry extract out of two, from the book Hornbill, to assess comprehension, interpretation, analysis, inference and appreciation. **3x1=3 Marks**

11. One Prose extract out of two, from the book Hornbill, to assess comprehension, interpretation, analysis, evaluation and appreciation. **3x1=3 Marks**

12. One prose extract out of two, from the book Snapshots, to assess comprehension, interpretation, analysis, inference and appreciation. **4x1=4 Marks**

13. Two Short answer type questions (one from Prose and one from Poetry, from the book Hornbill), outof four, to be answered in 40-50 words. Questions should elicit inferential responses through critical thinking. **3x2=6 Marks**

14. One Short answer type question, from the book Snapshots, to be answered in 40- 50 words. Questions should elicit inferential responses through critical thinking. One out of two questions to be done. **3x1=3 Marks**

15. One Long answer type question, from Prose/Poetry of Hornbill, to be answered in 120-150 words. Questions can be based on incident / theme / passage / extract / event, as reference points to assess extrapolation beyond and across the text. The question will elicit analytical and evaluative response from the student. Any one out of two questions to be done. **1x6=6 Marks**

16. One Long answer type question, based on the chapters from the book Snapshots, to be answered in 120-150 words, to assess global comprehension and extrapolation beyond the text. Questions to provide analytical and evaluative responses, using incidents, events, themes, as reference points. Any one out of two questions to be done. **1x6=6 Marks**

Prescribed Books

1. **Hornbill:** English Reader published by National Council of Education Research and Training, New Delhi

- The Portrait of a Lady (Prose)
- A Photograph (Poem)
- "We're Not Afraid to Die… if We Can Be Together
- Discovering Tut: The Saga Continues
- The Laburnum Top (Poem)
- The Voice of the Rain (Poem)
- Childhood (Poem)
- The Adventure
- Silk Road (Prose)
- Father to Son

2. **Snapshots:** Supplementary Reader published by National Council of Education Research and Training, New Delhi

- The Summer of the Beautiful White Horse (Prose)
- The Address (Prose)
- Mother's Day (Play)
- Birth (Prose)
- The Tale of Melon City

INTERNAL ASSESSMENT

Assessment of Listening Skills	- 05 marks.
Assessment of Speaking Skills	- 05 Marks
Project Work	- 10 Marks

ENGLISH CORE
QUESTION PAPER DESIGN
CLASS-XI (2025-26)

Section	Competencies	Total marks
Reading Skills	Conceptual understanding, decoding, Analyzing, inferring, interpreting, appreciating, literary, conventions and vocabulary, summarizing and using appropriate format/s.	26
Grammar and Creative Writing Skills	Conceptual Understanding, application of rules, Analysis, Reasoning, appropriate style and tone, using appropriate format and fluency, inference, analysis, evaluation and creativity.	23
Literature Text Book and Supplementary Reading Text	Recalling, reasoning, appreciating literary convention, inference, analysis, creativity with fluency, Critical Thinking.	31
	TOTAL	**80**
Internal Assessment	Assessment of Listening and Speaking Skills • Listening • Speaking	**10** 5+5
	• Project Work	**10**
	GRAND TOTAL	**100**

ENGLISH CORE
CLASS – XII (2025-26)

Section A
Reading Skills-22 Marks

I. Reading Comprehension through Unseen Passage **12+10 = 22 Marks**

1. One unseen passage to assess comprehension, interpretation, analysis and inference. Vocabulary assessment will also be assessed via inference. The passage may be factual, descriptive or literary.
2. One unseen **case-based factual** passage with verbal/visual inputs like statistical data, charts etc. to assess comprehension, interpretation, analysis, inference and evaluation.

Note: The combined word limit for both the passages will be 700-750 words.

Multiple Choice Questions / Objective Type Questions and Short Answer Type Questions (to be answered in 40-50 words) will be asked.

Section B

Creative Writing Skills-18 Marks

3. Notice, up to 50 words. One out of the two given questions to be answered. **(4 Marks**: Format :1 / Content: 2 / Accuracy of Spelling and Grammar: 1).

4. Formal/Informal Invitation and Reply, up to 50 words. One out of the two given questions to be answered. **(4 Marks**: Format: 1 / Content: 2 / Accuracy of Spelling and Grammar :1).

5. Letters based on verbal/visual input, to be answered in approximately 120-150 words. Letter types include application for a job with bio data or resume. Letters to the editor (giving suggestions or opinion on issues of public interest). One out of the two given questions to be answered. **(5 Marks**: Format: 1/Organisation of Ideas:1/Content:2/ Accuracy of Spelling and Grammar :1).

6. Article/ Report Writing, descriptive and analytical in nature, based on verbal inputs, to be answered in 120-150 words. One out of the two given questions to be answered. **(5 Marks**:Format:1/Organisation of Ideas:1/Content:2/Accuracy of Spelling and Grammar:1).

Section C

Literature Text Book and Supplementary Reading Text- 40 Marks

This section will have variety of assessment items including Multiple Choice Questions, Objective Type Questions, Short Answer Type Questions and Long Answer Type Questions to assess comprehension, interpretation, analysis, evaluation and extrapolation beyond the text.

7. One Poetry extract out of two, from the book **Flamingo,** to assess comprehension, interpretation, analysis, inference and appreciation. **(6x1=6 Marks)**

8. One Prose extract out of two, from the book **Vistas,** to assess comprehension, interpretation, analysis, evaluation and appreciation. **(4x1=4 Marks)**

9. One prose extract out of two from the book **Flamingo,** to assess comprehension, interpretation, analysis, inference and evaluation. **(6x1=6Marks)**

10. Short answer type questions **(from Prose and Poetry from the book Flamingo**), to be answered in 40-50 words each. Questions should elicit inferential responses through critical thinking. Five questions out of the six given, are to be answered. **(5x2=10 Marks)**

11. Short answer type questions, from **Prose (Vistas)**, to be answered in 40- 50 words each. Questions should elicit inferential responses through critical thinking. Any two out of three questions to be done. **(2x2=4 Marks)**

12. One Long answer type question, from **Prose/Poetry (Flamingo)**, to be answered in 120-150 words. Questions can be based on incident / theme / passage / extract / event as reference points to assess extrapolation beyond and across the text. The question will elicit analytical and evaluative response from the student. Any one out of two questions to be done. **(1x5=5 Marks)**

13. One Long answer type question, based on the chapters from the book **Vistas**, to be answered in 120-150 words, to assess global comprehension and extrapolation beyond the text. Questions to provide analytical and evaluative responses using incidents, events, themes, as reference points. Any one out of two questions to be done. **(1x5=5 Marks)**

Prescribed Books

1. **Flamingo:** English Reader published by National Council of Education Research and Training, New Delhi

Prose

- The Last Lesson
- Lost Spring
- Deep Water
- The Rattrap
- Indigo
- Poets and Pancakes
- The Interview
- Going Places

Poetry

- My Mother at Sixty-Six
- Keeping Quiet
- A Thing of Beauty
- A Roadside Stand
- Aunt Jennifer's Tigers

2. **Vistas:** Supplementary Reader published by National Council of Education Research and Training, New Delhi
   - The Third Level
   - The Tiger King
   - Journey to the End of the Earth
   - The Enemy
   - On the Face of It
   - Memories of Childhood
     - The Cutting of My Long Hair
     - We Too are Human Beings

INTERNAL ASSESSMENT

Assessment of Listening Skills	- 05 marks.
Assessment of Speaking Skills	- 05 Marks
Project Work	- 10 Marks

ENGLISH CORE

QUESTION PAPER DESIGN
CLASS- XII (2025-26)

Section	Competencies	Total marks
Reading Skills	Conceptual understanding, decoding, Analyzing, inferring, interpreting, appreciating, literary, conventions and vocabulary, summarizing and using appropriate format/s.	22
Creative Writing Sills	Conceptual Understanding, application of rules, Analysis, Reasoning, appropriate style and tone, using appropriate format and fluency, inference, analysis, evaluation and creativity.	18
Literature Text Book and Supplementary Reading Text	Recalling, reasoning, critical thinking, appreciating literary convention, inference, analysis, creativity with fluency.	40
	TOTAL	**80**
Internal Assessment	Assessment of Listening and Speaking Skills • Listening • Speaking	**10** 5+5
	• Project Work	**10**
	GRAND TOTAL	**100**

Annexure I

GUIDELINES FOR INTERNAL ASSESSMENT

Classes XI-XII **Total Marks: 20**

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

Assessment of Listening and Speaking Skills: (5+5=10 Marks)

i. **Activities:**

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

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

a. Interactive competence (Initiation & turn taking, relevance to the topic)

b. Fluency (cohesion, coherence and speed of delivery)

c. Pronunciation

d. Language (grammar and vocabulary)

SUGGESTIVE RUBRICS

	1	2	3	4	5
Interaction	• Contributions are mainly unrelated to those of other speakers • Shows hardly any initiative in the development of conversation • Very limited interaction	• Contributions are often unrelated to those of the other speaker • Generally passive in the development of conversation	• Develops interaction adequately, makes however minimal effort to initiate conversation • Needs constant prompting to take turns	• Interaction is adequately initiated and developed • Takes turn but needs some prompting	• Initiates & logically develops simple conversation on familiar topics • Takes turns appropriately
Fluency & Coherence	• Noticeably/ long pauses; rate of speech is slow	• Usually fluent; produces simple speech	• Is willing to speak at length, however repetition is	• Speaks without noticeable effort, with a little repetition	• Speaks fluently almost with no repetition & minimal

	• Frequent repetition and/or self-correction this is all right in informal conversation • Links only basic sentences; breakdown of coherence evident	fluently, but loses coherence in complex communication • Often hesitates and/or resorts to slow speech • Topics partly developed; not always concluded logically	noticeable • Hesitates and/or self corrects; occasionally loses coherence • Topics developed, but usually not logically concluded	• Demonstrates hesitation to find words or use correct grammatical structures and/or self-correction • Topics not fully developed to merit.	hesitation Develops topic fully & coherently
Pronunciation	• Frequent inaccurate pronunciation • Communication is severely affected	• Frequently unintelligible articulation • Frequent phonological errors • Major communication problems	• Largely correct pronunciation &clear articulation except occasional errors	• Mostly correct pronunciation & clear articulation • Is clearly understood most of the time;very few phonological errors	• Pronounces correctly & articulates clearly • Is always comprehensible • uses appropriate intonation
Vocabulary & Grammar	• Demonstrates almost no flexibility, and mostly struggles for appropriate words • Many Grammatical errors impacting communication	• Is able to communicate on some of the topics, with limited vocabulary. • Frequent errors, but self- corrects	• Is able to communicate on most of the topics, with limited vocabulary. A few grammatical errors	• Is able to communicate on most of the topics with appropriate vocabulary • Minor errors that do not hamper communication	• Is able to communicate on most of the topics using a wide range of appropriate vocabulary, using new words and expression • No grammatical errors

iii. Schedule:

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

Project Work + Viva: 10 Marks

Out of ten marks, 5 marks will be allotted for the project report/script /essay etc. and 5 marks for the viva

I. Schedule:

- Schools may refer to the suggestive timeline given in these guidelines for the planning, preparation and viva-voce of ALS based projects.
- The final assessment of the skills may be done on the basis of parameters suggested by the Board. Language teachers, however, have the option to adopt/ modify these parameters according to their school specific requirements.

II. Suggestions for Project Work:

- The Project can be inter-disciplinary in theme. The ideas/issues highlighted in the chapters/ poems/ drama given the prescribed books can also be developed in the form of a project. Students can also take up any relevant and age-appropriate theme.
- Such topics may be taken up that provide students with opportunities for listening and speaking. Some suggestions are as follows:

a) Interview-Based research:

Example:

- Students can choose a topic on which to do their research/ interview, e.g. a student can choose the topic: “Evolving food tastes in my neighbourhood” or “Corona pandemic and the fallout on families.” Read the available literature.
- The student then conducts interviews with a few neighbours on the topic. For an interview, with the help of the teacher, student will frame questions based on the preliminary research/background.
- The student will then write an essay/ write up / report etc. up to 1000 words on his/her research and submit it. He/ She will then take a viva on the research project. The project can be done in individually or in pairs/ groups

b) Students listen to podcasts/ interviews/radio or TV documentary on a topic and prepare a report countering or agreeing with the speakers. Write an 800 - 1000 words report and submit. Take a viva on the report.

c) Students create their own video/ Audio, after writing a script. Before they decide a format, the following elements can be taken into consideration:

- Theme/topic of the audio / video. Would the child like to pick a current issue or something artistic like theatre?
- What are the elements that need to be part of the script?
- Will the video/audio have an interview with one or more guests?

- Would they prefer to improvise while chatting with guests, or work from a script?
- What would be the duration?
- How would they present the script/report to the teacher? Can it be in the form of a narrative?

d) Students write**, direct and present a theatrical production, /One act play**

This will be a project which will be done as a team. It will involve planning, preparation and presentation. In short, various language skills will be utilised. There will be researching, discussion, writing the script, auditioning and ultimately producing the play. The project will end with a presentation and subsequently a viva. Teachers will be able to assess the core language skills of the students and help them grow as 21st century critical thinkers.

II. Instructions for the Teachers: -

1. Properly orient students about the Project work, as per the present Guidelines.
2. Facilitate the students in the selection of theme and topic.
3. Create a rubric for assessment and share with the students before they start so that they know the parameters of assessment:

- Teachers need to familiarize themselves with the method of assessing students with the rubric-- a table with different criteria and a grading scale.
- Choose the criteria on which you will grade students and list them along the left side of the page.
- Create an even number of columns along the top of the page. These columns will represent potential skill levels of the students.
- Assessing students on four/five criteria is an easy way to begin. For each criterion, define the ability that student would exhibit at each of the levels.
- The more detailed you make your criteria, the easier it will be to evaluate each student and define the level at which the student is presenting**.**
  {Sample Rubric is attached at the end for reference}

III. Parameters for Overall Assessment: -

1. Pronunciation:

- When evaluating the pronunciation of the students, teachers must listen for clearly articulated words, pronunciation of unusual spellings and intonation.
- Assess the students for the pronunciation skills and determine at which level the student needs improvement.

2. Vocabulary:

After noting their pronunciation levels, evaluate the students on the use of extensive and appropriate **vocabulary** during the viva. Check if students are using vocabulary appropriate to the context about which they are speaking.

3. **Accuracy**:

   Grammar has always been an important component of language skills. As students speak/ answer the questions during the viva, listen to their **grammatical structures**. *Are they competent enough to use multiple tenses? Is their word order correct in a given sentence?* An effective speaker will automatically use the correct grammatical structures of his language.

4. **Communication**:

   Assessing the **communication skills** of the students means looking at more than language. Look at how creatively students use the language to make their points understood. Students with a low level of vocabulary and grammar may still have good communication skills if they are able to make the teacher understand their point of view.

5. **Interaction**:

   - During the viva teachers need to ask the students some questions. Questions need to be based on the projects that have been suggested or chosen by the students.
   - It is imperative for a teacher to read the essays/project reports before they can be ready to ask questions.
   - Teachers need to observe how students answer the questions that are posed to them: *Are they able to understand and answer questions independently or can they answer only when the questions are translated into simpler words or repeated? Are they able to give appropriate responses in a conversation*?
   - These elements of **interaction** are necessary for clear and effective communication. A student with effective interaction skills will be able to answer questions with relative ease and follow the flow of conversation.

6. **Fluency**:

   - Fluency may be the easiest quality to judge in the students' speech: *How comfortable are they as they speak and express themselves? How easily do the words come out? Are there inappropriate pauses and gaps in the way a student speaks?*
   - **Fluency** is a judgement of this communication and is an important criterion when evaluating speaking skills. These criteria: pronunciation, vocabulary, accuracy, interaction and fluency are all the hallmarks of a student's overall speaking abilities.
   - Teachers must also remember that some **students may excel in one area and struggle in another**. Helping the students understand these issues will enable them to become effective speakers in future. Let your students know that you will be assessing them in these various areas when you evaluate their progress and encourage them to work and improve in these areas.
   - **Finally,** teachers must remember that a proper evaluation of the students will take into consideration **more than just one oral interview on the final ASL** project. Teachers must take note of a student's progress throughout the academic year.

IV. Project-Portfolio/ Project Report

The **Project-Portfolio/Project Report** is a compilation of the work that the students produce during the process of working on their ALS Project.

The Project-Portfolio may include the following:

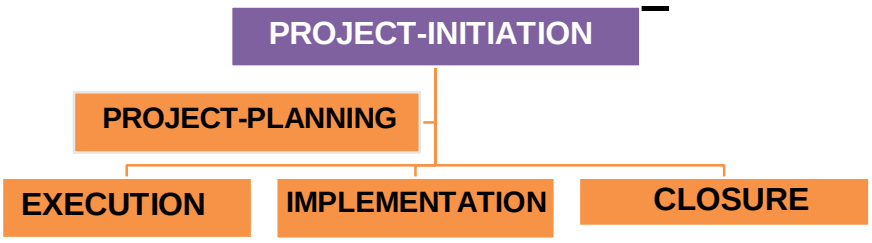
- Cover page, with title of project, school details/details of students.
- Statement of purpose/objectives/goals
- Certificate of completion under the guidance of the teacher.
- Students Action Plan for the completion of assigned tasks.
- Materials such as scripts for the theatre/role play, questionnaires for interview, written assignments, essays, survey-reports and other material evidence of learning progress and academic accomplishment.
- The 800-1000 words essay/Script/Report.
- Student/group reflections.
- If possible, Photographs that capture the positive learning experiences of the student(s).
- List of resources/bibliography

The following points must be kept for consideration while assessing the project portfolios:

- Quality of content of the project
- Accuracy of information
- Adherence to the specified timeline
- Content in respect of (spellings, grammar, punctuation)
- Clarity of thoughts and ideas
- Creativity
- Contributions by group members
- Knowledge and experience gained

V. Suggestive Timeline:

The FIVE Steps in Project Plan



Month	Objectives
Planning and Research for the Project Work **Preferably till November-December**	• Teachers plan a day to orient students about the ALS projects, details are shared with all stakeholders. • Students choose a project, select team members and develop project- plan. • Group meets (preferably online) and reports to the team leader about the progress: shortfalls and successes are detailed. • Team leader apprises teacher-mentor. • Students working individually or in pairs also update the teachers. • A logical, deliverable and practical plan is drafted by the team/ pair/individual. Goals/objectives are clearly defined for all. • Work is delegated to team members by the team leader. Students wishing to work alone develop their own plan of Action. • Detailed project schedules are shared with the teacher.
December- January	• Suggestions and improvements are shared by the teacher, wherever necessary. • Group members coordinate and keep communication channels open for interaction. • Gaps (if any) are filled with the right skill sets by the Team Leader/ individual student. • The final draft of the project portfolio/ report is prepared and submitted for evaluation.
January-February	• Students are assessed on their group/pair/individual presentations on allotted days. Final Viva is conducted by the External/Internal examiner.
February-March or as per the timelines given by the Board	• Marks are uploaded on the CBSE website.

SAMPLE RUBRIC FOR ALS Project Work (For Theatre/Role Play/Oral presentation/ Interview/ Podcast)

CATEGORY	1	2	3	4	5
TIME LIMIT	Presentation is less than or more than 5 minutes long	Presentation exceeded or less than specified time limit by 4 to 5 minutes	Presentation exceeded or less than specified time limit by 3 to 4 minutes	Presentation exceeded or less than specified time limit by 2 to 3 mins	Student/ group adhered to the given time limit
CONTENT/ SCRIPT/ QUESTIONNAIRE	Script is not related to topic or issue	Well written script/content shows little understanding of parts of topic	Well written script/content shows good understanding of parts of topic	Well written script/content shows a good understanding of subject topic	Well written script/content shows full understanding of subject topic
CREATIVITY	No props/ costumes/ stage presentation lack-lustre	Some work done, average stage set-up and costumes	Well organized presentation, could have improved	Logical use of props, reasonable work done, creative	Suitable props /effort seen/ considerable work done/ Creative and relevant costumes
PREPAREDNESS	Student/ group seems to be unprepared	Some visible preparedness but Rehearsal is lacking	Somewhat prepared, rehearsal is lacking	Good preparedness but need better rehearsal	Complete Preparedness /rehearsed presentation
CLARITY OF SPEECH	Lack of clarity in presentation many words mis-pronounced	Speaks clearly some words are mis-pronounced	Speaks clearly 90% of the time/ a few mis-pronounced words	Speaks clearly and distinctly 95% of time/ Few mis-pronounced words	Speaks clearly distinctly 95% of time/ fluency in pronunciation
USE OF PROPS (Theatre/Role Play)	Only 1/no relevant props used Very little use of facial expressions /body language, Does not generate much interest	1 to 2 relevant props used Little Use of facial expressions and body language	2 to 3 relevant props used Facial expressions and body language is used to try to generate some enthusiasm	3 to 4 relevant props used Facial expression and body language sometimes generate enthusiasm with the topic	4 to 5 relevant props used Facial expression and body language generate enthusiasm with the topic
PORTFOLIO-PRESENTATION	Inadequate & unimpressive	Somewhat suitable & convincing	Adequate & relevant	Interesting, enjoyable & relevant	Brilliant, creative& exceptional

CHEMISTRY
Subject Code: 043
Classes XI-XII (2025-26)

Rationale

The second phase of Secondary stage is the most crucial stage of school education because at this juncture specialized discipline based, content - oriented courses are introduced. Students reach this stage after 10 years of general education and opt for Chemistry with a purpose of pursuing their career in basic sciences or professional courses like medicine, engineering, technology and study courses in applied areas of science and technology at tertiary level. Therefore, there is a need to provide the learners with a sufficient conceptual background of Chemistry, which will make them competent to meet the challenges of academic and professional courses after this stage.

The new and updated curriculum is based on a disciplinary approach with rigor and depth taking care that the syllabus is not heavy and at the same time it is comparable to that at the international level. The pedagogy of Chemistry has undergone tremendous changes in recent times. Many new areas like green chemistry, material science, biomolecules, and industrial chemistry deserve to be an integral part of the chemistry syllabus at this stage. Globally, nomenclature of elements and compounds, symbols and units of physical quantities recommended by scientific bodies like IUPAC and CGPM are of immense importance and also need to be incorporated in the updated syllabus. The proposed syllabus adequately addresses these issues.

Objectives

The curriculum of Chemistry at the second phase of Secondary stage has been designed to:

- equip the learners with tools to understand the working of Chemistry rather than mere facts of it;
- develop the necessary conceptual foundations of chemistry and ability to apply them to real life situations;
- enable the learners to represent chemical phenomena at macroscopic, molecular, and symbolic levels;
- make the learners identify patterns and form connections that underlie various chemical phenomena;
- prepare the learners to contribute to frontier research areas related to climate change, environmental issues, materials science, biology and medicine etc.:
- inculcate problem solving skills in the learners and integrate life skills and values in the context of chemistry; and
- apprise learners of the interface of chemistry with other disciplines of science such as physics, biology, geology, engineering etc.

COURSE STRUCTURE
CLASS XI
THEORY

Time: 3 Hours **Total Marks: 70**

S. No	UNIT	Marks
1	Some Basic Concepts of Chemistry	7
2	Structure of Atom	9
3	Classification of Elements and Periodicity in Properties	6
4	Chemical Bonding and Molecular Structure	7
5	Chemical Thermodynamics	9
6	Equilibrium	7
7	Redox Reactions	4
8	Organic Chemistry: Some basic Principles and Techniques	11
9	Hydrocarbons	10
	TOTAL	**70**

Unit 1: Some Basic Concepts of Chemistry

General Introduction: Importance and scope of Chemistry, Nature of matter, laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules, atomic and molecular masses, mole concept and molar mass, percentage composition, empirical and molecular formula, chemical reactions, stoichiometry and calculations based on stoichiometry.

Unit 2: Structure of Atom

Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbitals, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals - Aufbau principle, Pauli's exclusion principle and Hund's rule, electronic configuration of atoms, stability of half-filled and completely filled orbitals.

Unit 3: Classification of Elements and Periodicity in Properties

Significance of classification, brief history of the development of periodic table, modern periodic law and the present form of periodic table, periodic trends in properties of elements -atomic radii, ionic radii, inert gas radii, Ionization enthalpy, electron gain enthalpy, electronegativity, valiancy, Nomenclature of elements with atomic number greater than 100.

Unit 4: Chemical Bonding and Molecular Structure

Valence electrons, ionic bond, covalent bond, bond parameters, Lewis structure, polar character of covalent bond, covalent character of ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theory, concept of hybridization, involving s, p and d orbitals and shapes of some simple molecules, molecular orbital theory of homonuclear diatomic molecules (qualitative idea only), Hydrogen bond.

Unit 5: Chemical Thermodynamics

Concepts of System and types of systems, surroundings, work, heat, energy, extensive and intensive properties, state functions.

First law of thermodynamics -internal energy and enthalpy, heat capacity and specific heat, measurement of ΔU and ΔH, Hess's law of constant heat summation, enthalpy of bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization, solution and dilution. Second law of Thermodynamics (brief introduction), Introduction of entropy as a state function, Gibb's energy change for spontaneous and non- spontaneous processes, criteria for equilibrium, Third law of thermodynamics (brief introduction).

Unit 6: Equilibrium

Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of mass action, equilibrium constant, factors affecting equilibrium – Le Chatelier's principle, ionic equilibrium- ionization of acids and bases, strong and weak electrolytes, degree of ionization, ionization of poly basic acids, acid strength, concept of pH, hydrolysis of salts (elementary idea), buffer solution, Henderson Equation, solubility product, common ion effect (with illustrative examples).

Unit 7: Redox Reactions

Concept of oxidation and reduction, redox reactions, oxidation number, balancing redox reactions, in terms of loss and gain of electrons and change in oxidation number, applications of redox reactions.

Unit 8: Organic Chemistry – Some Basic Principles and Techniques

General introduction, methods of purification, qualitative and quantitative analysis, classification and IUPAC nomenclature of organic compounds. Electronic displacements in a covalent bond: inductive effect, electrometric effect, resonance and hyper conjugation. Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carbanions, electrophiles and nucleophiles, types of organic reactions.

Unit 9: Hydrocarbons

Aliphatic Hydrocarbons

Alkanes - Nomenclature, isomerism, conformation (ethane only), physical properties, chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis.

Alkenes - Nomenclature, structure of double bond (ethene), geometrical isomerism, physical properties, methods of preparation, chemical reactions: addition of hydrogen, halogen, water, hydrogen halides (Markovnikov's addition and peroxide effect), ozonolysis, oxidation, mechanism of electrophilic addition.

Alkynes - Nomenclature, structure of triple bond (ethyne), physical properties, methods of preparation, chemical reactions: acidic character of alkynes, addition reaction of - hydrogen, halogens, hydrogen halides and water.

Aromatic Hydrocarbons

Introduction, IUPAC nomenclature, benzene: resonance, aromaticity, chemical properties: mechanism of electrophilic substitution. Nitration, sulphonation, halogenation, Friedel Craft's alkylation and acylation, directive influence of functional group in mono substituted benzene, carcinogenicity and toxicity

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

1. **s & p Block Elements**
   Electronic configuration, atomic & Ionic radii, Ionization Enthalpy, Hydration Enthalpy and general trends in physical and chemical properties of s and p block elements across the periods and down the groups; unique behavior of the first element in each group.
2. **The Gaseous State**
   Qualitative treatment of Gas laws, Ideal gas equation and deviations from it.

PRACTICAL

Evaluation Scheme for Examination	Marks
Volumetric Analysis	08
Salt Analysis	08
Content Based Experiment	06
Project Work	04
Class record and viva	04
Total	**30**

PRACTICAL SYLLABUS

Micro-chemical methods are available for several of the practical experiments, wherever possible such techniques should be used.

A.Basic Laboratory Techniques

1. Cutting glass tube and glass rod
2. Bending a glass tube
3. Drawing out a glass jet
4. Boring a cork

B.Characterization and Purification of Chemical Substances

1. Determination of melting point of an organic compound.
2. Determination of boiling point of an organic compound.
3. Crystallization of impure sample of any one of the following: Alum, Copper Sulphate, Benzoic Acid.

C.Experiments based on pH

1. Any one of the following experiments:
    - Determination of pH of some solutions obtained from fruit juices, solution of known and varied concentrations of acids, bases and salts using pH paper or universal indicator.
    - Comparing the pH of solutions of strong and weak acids of same concentration.
    - Study the pH change in the titration of a strong base using a universal indicator.
2. Study the pH change by common-ion in case of weak acids and weak bases.

D. Chemical Equilibrium

Any one of the following experiments:

- Study the shift in equilibrium between ferric ions and thiocyanate ions by increasing/decreasing the concentration of either of the ions.
- Study the shift in equilibrium between $[Co(H_2O)_6]^{2+}$ and chloride ions by changing the concentration of either of the ions.

E. Quantitative Estimation

1. Using a mechanical balance/electronic balance.
2. Preparation of standard solution of Oxalic acid.
3. Determination of strength of a given solution of Sodium hydroxide by titrating it against standard solution of Oxalic acid.
4. Preparation of standard solution of Sodium carbonate.
5. Determination of strength of a given solution of hydrochloric acid by titrating it against standard Sodium Carbonate solution.

F. Qualitative Analysis

1. Determination of one anion and one cation in a given salt

Cations: Pb^{2+},Cu^{2+}, Al^{3+}, Fe^{3+},Mn^{2+}, Ni^{2+}, Zn^{2+}, Co^{2+}, Ca^{2+},Sr^{2+}, Ba^{2+}, Mg^{2+}, NH_4^+

Anions: CO_3^{2-},S^{2-} , SO_3^{2-},NO_3^-, NO_2^- , Cl^-, Br^-, I^- ,SO_4^{2-}, PO_4^{3-} , CH_3COO^-

(Note: Insoluble salts excluded)

2. Detection of -Nitrogen, Sulphur, Chlorine in organic compounds.

PROJECTS

Scientific investigations involving laboratory testing and collecting information from other sources.

A few suggested Projects

a) Checking the bacterial contamination in drinking water by testing sulphide ion

b) Study of the methods of purification of water

c) Testing the hardness, presence of Iron, Fluoride, Chloride, etc., depending upon the regional variation in drinking water and study of causes of presence of these ions above permissible limit (if any).

d) Investigation of the foaming capacity of different washing soaps and the effect of addition of Sodium carbonate on it

e) Study the acidity of different samples of tea leaves.

f) Determination of the rate of evaporation of different liquids

g) Study the effect of acids and bases on the tensile strength of fibers.

h) Study of acidity of fruit and vegetable juices.

Note: *Any other investigatory project, which involves about 10 periods of work, can be chosen with the approval of the teacher.*

Practical Examination for Visually Challenged Students Class XI

Note: *Same Evaluation scheme and general guidelines for visually challenged students as given for Class XII may be followed.*

List of apparatus for identification for assessment in practicals (All experiments)

Beaker, tripod stand, wire gauze, glass rod, funnel, filter paper, Bunsen burner, test tube, test tube stands, dropper, test tube holder, ignition tube, china dish, tongs, standard flask, pipette, burette, conical flask, clamp stand, dropper, wash bottle

- Odor detection in qualitative analysis.
- Procedure/Setup of the apparatus.

List of Experiments

A. Characterization and Purification of Chemical Substances

Crystallization of an impure sample of any one of the following:
copper sulphate, benzoic acid.

B. Experiments based on pH

1. Determination of pH of some solutions obtained from fruit juices, solutions of known and varied concentrations of acids, bases and salts using pH paper.
2. Comparing the pH of solutions of strong and weak acids of same concentration.

C. Chemical Equilibrium

1. Study the shift in equilibrium between ferric ions and thiocyanate ions by increasing/decreasing the concentration of either ions.
2. Study the shift in equilibrium between $[Co(H_2O)_6]^{2+}$ and chloride ions by changing the concentration of either of the ions.

D. Quantitative estimation

1. Preparation of standard solution of oxalic acid.

2. Determination of molarity of a given solution of sodium hydroxide by titrating it against standard solution of oxalic acid.

E. Qualitative Analysis

1. Determination of one anion and one cation in a given salt

   Cations - NH_4^+

   Anions: CO_3^{2-},S^{2-} , SO_3^{2-}, , Cl^-, CH_3COO^-

   (Note: insoluble salts excluded)

2. Detection of Nitrogen in the given organic compound.
3. Detection of Halogen in the given organic compound.

Note: *The above practical may be carried out in an experiential manner rather than recording observations.*

Prescribed Books:

1. Chemistry Part – I, Class-XI, Published by NCERT.
2. Chemistry Part – II, Class-XI, Published by NCERT.
3. Manual of Microscale Chemistry laboratory kit.

Links for NCERT textbooks:

1. **https://ncert.nic.in/textbook.php?kech1=0-6**
2. **https://ncert.nic.in/textbook.php?kech2=0-3**
3. **https://ncert.nic.in/division/dek/pdf/Manual_01.pdf**

COURSE STRUCTURE
CLASS XII
THEORY

Time: 3 Hours **Total Marks: 70**

S. No.	Title	Marks
1	Solutions	7
2	Electrochemistry	9
3	Chemical Kinetics	7
4	d -and f -Block Elements	7
5	Coordination Compounds	7
6	Haloalkanes and Haloarenes	6
7	Alcohols, Phenols and Ethers	6
8	Aldehydes, Ketones and Carboxylic Acids	8
9	Amines	6
10	Biomolecules	7
	Total	**70**

Unit 1: Solutions

Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, Raoult's law, colligative properties - relative lowering of vapor pressure, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties, abnormal molecular mass, Van't Hoff factor

Unit 2: Electrochemistry

Redox reactions, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and law of electrolysis (elementary idea), dry cell-electrolytic cells and Galvanic cells, lead accumulator, fuel cells, corrosion.

Unit 3: Chemical Kinetics

Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half-life (only for zero and first order

reactions), concept of collision theory (elementary idea, no mathematical treatment), activation energy, Arrhenius equation.

Unit 4: d and f Block Elements

General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transition metals – metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation, preparation and properties of $K_2Cr_2O_7$ and $KMnO_4$.

Lanthanides - Electronic configuration, oxidation states, chemical reactivity and lanthanide contraction and its consequences.

Actinides - Electronic configuration, oxidation states and comparison with lanthanides

Unit 5: Coordination Compounds

Coordination compounds - Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT; structure and stereoisomerism, importance of coordination compounds (in qualitative analysis, extraction of metals and biological system).

Unit 6: Haloalkanes and Haloarenes

Haloalkanes: Nomenclature, nature of C–X bond, physical and chemical properties, optical rotation mechanism of substitution reactions.
Haloarenes: Nature of C–X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only).
Uses and environmental effects of - dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.

Unit 7: Alcohols, Phenols and Ethers

Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration, uses with special reference to methanol and ethanol.
Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols.
Ethers: Nomenclature, methods of preparation, physical and chemical properties, uses

Unit 8: Aldehydes, Ketones and Carboxylic Acids

Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes, uses.

Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses.

Unit 9: Amines

Amines: Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines.

Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.

Unit 10: Biomolecules

Carbohydrates - Classification (aldoses and ketoses), monosaccahrides (glucose and fructose), D-L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates.

Proteins -Elementary idea of - amino acids, peptide bond, polypeptides, proteins, structure of proteins - primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins; enzymes. Hormones - Elementary idea excluding structure.

Vitamins - Classification and functions.

Nucleic Acids: DNA and RNA.

PRACTICAL

Evaluation Scheme for Examination	**Marks**
Volumetric Analysis	08
Salt Analysis	08
Content Based Experiment	06
Project Work	04
Class record and viva	04
Total	**30**

PRACTICAL SYLLABUS

Micro-chemical methods are available for several of the practical experiments, wherever possible such techniques should be used.

A. Surface Chemistry

1. Preparation of one lyophilic and one lyophobic sol

Lyophilic sol - starch, egg albumin and gum

Lyophobic sol – aluminum hydroxide, ferric hydroxide, arsenous sulphide.

2. Dialysis of sol-prepared in (a) above.
3. Study of the role of emulsifying agents in stabilizing the emulsion of different oils.

B. Chemical Kinetics

1. Effect of concentration and temperature on the rate of reaction between Sodium Thiosulphate and Hydrochloric acid.
2. Study of reaction rates of any one of the following:
   - Reaction of Iodide ion with Hydrogen Peroxide at room temperature using different concentration of Iodide ions.
   - Reaction between Potassium Iodate, (KIO_3) and Sodium Sulphate: (Na_2SO_3) using starch solution as indicator (clock reaction).

C. Thermochemistry

Any one of the following experiments

- Enthalpy of dissolution of Copper Sulphate or Potassium Nitrate.
- Enthalpy of neutralization of strong acid (HCl) and strong base (NaOH).
- Determination of enthalpy change during interaction (Hydrogen bond formation) between Acetone and Chloroform.

D. Electrochemistry

Variation of cell potential in $Zn/Zn^{2+}||\ Cu^{2+}/Cu$ with change in concentration of electrolytes ($CuSO_4$ or $ZnSO_4$) at room temperature.

E. Chromatography

1. Separation of pigments from extracts of leaves and flowers by paper chromatography and determination of Rf values.
2. Separation of constituents present in an inorganic mixture containing two cations only (constituents having large difference in Rf values to be provided).

F. Preparation of Inorganic Compounds

1. Preparation of double salt of Ferrous Ammonium Sulphate or Potash Alum.
2. Preparation of Potassium Ferric Oxalate.

G. Preparation of Organic Compounds

Preparation of any one of the following compounds

1. Acetanilide

2. Di -benzalAcetone
3. p-Nitroacetanilide
4. Aniline yellow or 2 - Naphthol Aniline dye.

H. Tests for the functional groups present in organic compounds

Unsaturation, alcoholic, phenolic, aldehydic, ketonic, carboxylic and amino (Primary) groups.

I. Characteristic tests of carbohydrates, fats and proteins in pure samples and their detection in given foodstuffs.

J. Determination of concentration/ molarity of KMnO4 solution by titrating it against a standard solution of:

1. Oxalic acid,
2. Ferrous Ammonium Sulphate

(Students will be required to prepare standard solutions by weighing themselves).

K. Qualitative analysis

Determination of one anion and one cation in a given salt

Cations: Pb^{2+},Cu^{2+}, Al^{3+}, Fe^{3+},Mn^{2+}, Ni^{2+} Zn^{2+} Co^{2+} $Ca^{2+}$$Sr^{2+}$ Ba^{2+} Mg^{2+}, NH_4^+

Anions: CO_3^{2-},S^{2-} , SO_3^{2-}, NO_3^-, NO_2^- , Cl^-, Br^-, I^- ,SO_4^{2-}, PO_4^{3-} , CH_3COO^-, $C_2O_4^{2-}$

(Note: Insoluble salts excluded)

PROJECTS

Scientific investigations involving laboratory testing and collecting information from other sources.

A few suggested Projects

a) Study of the presence of oxalate ions in guava fruit at different stages of ripening.

b) Study of quantity of casein present in different samples of milk.

c) Preparation of soybean milk and its comparison with the natural milk with respect to curd formation, effect of temperature, etc.

d) Study of the effect of Potassium Bisulphate as food preservative under various conditions (temperature, concentration, time, etc.)

e) Study of digestion of starch by salivary amylase and effect of pH and temperature on it.

f) Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, carrot juice, etc.

g) Extraction of essential oils present in Saunf (aniseed), Ajwain (carom), Illaichi (cardamom).

h) Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chili powder and pepper.

Note: *Any other investigatory project, which involves about 10 periods of work, can be chosen with the approval of the teacher.*

Practical Examination for Visually Challenged Learners Classes XI and XII

Evaluation Scheme	**Marks**
Identification/Familiarity with the apparatus	5
Written test (based on given/prescribed practical's)	10
Practical Record	5
Viva	10
Total	**30**

General Guidelines

- The practical examination will be of two-hour duration.
- A separate list of ten experiments is included here.
- The written examination in practicals for these students will be conducted at the time of practical examination of all other students.
- The written test will be of 30 minutes' duration.
- The question paper given to the students should be legibly typed. It should contain a total of 15 practical skill based very short answer type questions. A student would be required to answer any 10 questions.
- A writer may be allowed to such students as per CBSE examination rules.
- All questions included in the question papers should be related to the listed practicals
- Every question should require about two minutes to be answered.
- These students are also required to maintain a practical file. A student is expected to record at least five of the listed experiments as per the specific instructions for each subject. These practicals should be duly checked and signed by the internal examiner.
- The format of writing any experiment in the practical file should include aim, apparatus required, simple theory, procedure, related practical skills, precautions etc.
- Questions may be generated jointly by the external/internal examiners and used

for assessment.

- The viva questions may include questions based on basic theory/principle/concept, apparatus/materials/ chemicals required, procedure, precautions, sources of error etc.

List of apparatus for identification/familiarity for assessment in practical (All experiments)

Beaker, glass rod, tripod stand, wire gauze, Bunsen burner, Whatman filter paper, gas jar, capillary tube, pestle and mortar, test tubes, tongs, test tube holder, test tube stand, burette, pipette, conical flask, standard flask, clamp stand, funnel, filter paper

Hands-on Assessment

- Identification/familiarity with the apparatus
- Odour detection in qualitative analysis

List of Experiments

The experiments have been divided into two sections: Section A and Section B. The experiments mentioned in Section B are mandatory.

SECTION A

A. Surface Chemistry

1. Preparation of one lyophilic and one lyophobic sol
   i. Lyophilic sol - starch, egg albumin and gum
   ii. Lyophobic sol – Ferric hydroxide

B. Chromatography

Separation of pigments from extracts of leaves and flowers by paper chromatography and determination of Rf values (distance values may be provided).

C. Tests for the functional groups present in organic compounds

1. Alcoholic and Carboxylic groups
2. Aldehyde and Kenotic groups

D. Characteristic tests of carbohydrates and proteins in the given foodstuffs.

E. Preparation of Inorganic Compounds- Potash Alum

SECTION B (Mandatory)

F. Quantitative analysis

1. (a) Preparation of a given volume of the standard solution of Oxalic acid.

   (b) Determination of molarity of $KMnO_4$ solution by titrating it against a standard solution of Oxalic acid.

2. The above exercise [F 1 (a) and (b)] to be conducted using Ferrous ammonium sulphate (Mohr's salt)

G. Qualitative Analysis

Determination of one anion and one cation in a given salt

Cation - $\boldsymbol{NH_4^+}$

Anions: $\boldsymbol{CO_3^{2-}}$**,**$\boldsymbol{S^{2-}}$ **,** $\boldsymbol{SO_3^{2-}}$**, , ** $\boldsymbol{Cl^-}$**,** $\boldsymbol{CH_3COO^-}$

(Note: insoluble salts excluded)

Note: *The above practical may be carried out in an experiential manner rather than recording observations.*

Prescribed Books:

1. Chemistry Part – I, Class-XII, Published by NCERT.
2. Chemistry Part – II, Class-XII, Published by NCERT.
3. Manual of Microscale Chemistry laboratory kit.

Links for NCERT textbooks:

1. **https://ncert.nic.in/textbook.php?lech1=0-5**
2. **https://ncert.nic.in/textbook.php?lech2=0-5**
3. **https://ncert.nic.in/division/dek/pdf/Manual_01.pdf**

QUESTION PAPER DESIGN CLASSES XI & XII

S.No	Domains	Total Marks	%
1	**Remembering and Understanding:** Exhibit memory of previously learned material by recalling facts, terms, basic concepts and answers. Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions and stating main ideas.	28	40
2	**Applying:** Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	21	30
3	**Analysing, Evaluating and Creating:** 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. Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.	21	30

1. No chapter wise weightage is provided, however, care to be taken to cover all the chapters.
2. Suitable internal variations may be made for generating various templates.
3. There will be no overall choice in the question paper.
4. However, 33% internal choices will be given in all the sections.

HEALTH AND PHYSICAL EDUCATION [502]

GRADE XI AND XII - 2025-26

The development of capacities that promote student wellness such as fitness, good health, psycho-social well-being, and sound ethical grounding are also critical for high-quality learning

-National Education Policy 2020

CENTRAL BOARD OF SECONDARY EDUCATION

ACADEMIC UNIT ,SHIKSHA SADAN , 17 , ROUSE AVENUE NEW DELHI - 110002

HEALTH AND PHYSICAL EDUCATION / 502 /XI-XII /2024-2025

Health and Physical Education focuses on holistic development, both mental and physical, understanding the importance of physical fitness, health, wellbeing and the factors that contribute to them.Focus of this area is on helping children develop a positive attitude and commitment to lifelong, healthy active living and the capacity to live satisfying, productive lives with the help of health management, indigenous sports, Yoga, NCC, self-defense, fitness and lifestyle choices.

Health and Physical Education focuses on holistic development, both mental and physical, understanding the importance of physical fitness, health, wellbeing and the factors that contribute to them. Focus of this area of curriculum is on helping children develop a positive attitude and commitment to life long, healthy and active living and the capacity to live satisfying, productive lives with the help of health, hygiene and sanitation, work experience, indigenous sports, yoga, NCC, self-defense, fitness and lifestyle choices. Health and Physical Activities, preferably sports must be given one regular period per day. Students should be provided opportunities to get professionally trained in the area of their interest. Indigenous sports, yoga and NCC must be encouraged in the schools as they develop physical fitness, discipline, sportsmanship combined with patriotism, self-sacrifice and health care. Similarly Self-defense may be actively taught to students, especially girl students, as it instills confidence and empowers them. The teachers should ensure that the students get opportunities to participate in activities of their choice and help them in identifying and nurturing their talents and gaining confidence. The Physical Education teacher will maintain the record of all the Health and Physical Education activities/competitions that each of the children participate in. The Comprehensive School Health Manuals (four volumes) brought out by CBSE could be referred to for detailed information and the graded activities could be taken up as part of thecurriculum in school.

To address the Health aspect of HPE, qualified doctors should examine children once in a year along with a follow-up session during the year. School should also bring any noticeable disability in a student to the notice of the school counselor and parents. Cases of special needs of students with medical history must be carefully noted and handled accordingly. Detailed information on the Comprehensive Physical and Health Education Curriculum is enclosed with this document.

1. BACKGROUND/ RATIONALE

Health and Physical Education is concerned with the total health of the learner and the community. Besides physical health, it includes mental and emotional health of the learners. Health is often a state of physical, mental, emotional, social and spiritual well-being and not merely the absence of disease or infirmity.

1.1.1 The aim of Mainstreaming Health and Physical Education is to enable the student to attain an optimum state of health, by incorporating each of the aforementioned aspects.

1.1.2 In this respect, it is a truism to say that the practice of healthy living will serve as the foundation for Physical Education. It is envisaged that any effort to promote aesthetic values at the school level will include a natural esteem for physical well-being. The mastery of the body, its powers and qualities, requires knowledge, methodical training and exercise. The skills and capacities need to be developed, the muscles and nerves trained, the senses cultivated and hygienic and proper dietary habits inculcated for this purpose.

1.1.3 Therefore, provision has to be made much more systematically than before, in the school curriculum for Health and Physical Education imbued with Life Skills

1.1.4 Research has demonstrated that there is a positive correlation between brain development and exercise which also has an impact on cognitive development thus helping to improve academic grades.

1.1.5 A comprehensive view of Health and Physical Education includes and encompasses the three areas of Health Education, Physical Education and Yoga as integral to achieving holistic health (physical, mental, intellectual, emotional, social and spiritual). Given the interdisciplinary nature of this subject, it needs to be transacted in innovative ways across the curriculum.

1.1.6 The ubiquitous digital presence can be an added resource for the student, teacher educator and the teacher. It provides endless possibilities of resorting to online resources to add value to PE.

1.1.7 At the Secondary level acquisition of the habits of healthy living and participation in games and sports and athletics for neuromuscular coordination and physical fitness are the aims which should be taken care of while developing any syllabus of Health and Physical Education.

1.1.8 While at the Senior Secondary level, through the integrated PE approach, students will acquire the knowledge, skills, right attitudes and values towards the pursuit of a lifelong physically active and healthy lifestyle.

2. LEARNING OBJECTIVES

1.2.1 To develop awareness regarding the importance of physical fitness in individual and social life including Life Skills.

1.2.2 To bring the overall awareness of values with regard to personal health and fitness, and to inculcate among students the desired habits and attitudes towards health to raise their health status.*

1.2.3 To make the pupils physically, mentally and emotionally fit and to develop such personal and social qualities that will help them to be good human beings.*

1.2.4 To take action individually and collectively to protect and promote (i) own health (ii) health of family members: and (iii) health of the surrounding community and seeking help when required from available community resources.*

1.2.5 To develop interest in exercise, sports and games for self-satisfaction and make it a part of life;

1.2.6 To enable an individual to enhance inner qualities - self-mastery, discipline, courage, confidence and efficiency.*

1.2.7 To enable an individual to display a sense of responsibility, patriotism, self-sacrifice and service to the community *

1.2.8 To develop awareness of the importance of self-defense.*

1.2.9 To create awareness among children about rules of safety in appropriate hazardous situations to avoid accidents and injuries. To acquaint them with first-aid measures about common sickness and injuries. *

1.2.10 To help children learn correct postural habits in standing, walking, running, sitting and other basic movements so as to avoid postural defects and physical deformities. *

1.2.11 To help children grow as responsible citizens by inculcating in them certain social and moral values through games, sports, Red Cross, Scouts and Guides etc. *

1.2.12 To inculcate values and skills in children in order to promote self-control, concentration, peace and relaxation to avoid the ill effects of stress, strain and fatigue of routine everyday life. *

1.2.13 To address the physical, psycho-social needs of CWSN (Children with Special Needs) in an integrated fashion. *

1.2.14 To seek in instilling self-worth thus helping students to become confident,assertive, emotionally stable, independent and self-controlled. *

1.2.15 To help release of emotional stress, anxiety and tension, leading to a reduced risk of depression. *

1.2.16 To help strengthen peer relationships, social bonding, buddy mentorship and team camaraderie.

1.2.17.To develop more positive attitude towards challenges, winning and losing, thus preparing students for life and for the workplace.*

* Values Integrated across HPE

3. COURSE STRUCTURE

Strand	Strand Name	No. of periods	Marks allotted	Teacher/Person Responsible
1	Games/Sports* 1.Athletics/Swimming 2.Team Games 3.Individual Games 4.Adventure Sports 5.Indigenous Games	90	50	PE Teacher
2	Health and Fitness 1.Physical Health 2.Social Health 3.Emotional Health	50	25	PE Teacher Yoga Teacher Health and Wellness Coordinator Counselor
3	SEWA	50	25	SEWA Coordinator [Any Subject]
4	Health and Activity Card	10		Class Coordinator
4.1.Physical Check up				Qualified Doctor
4.2.Posture Evaluation				Physiotherapist/Nurse
4.3.Sporting Activities				
4.3.1.Strand 1				PET
4.3.2.Strand 2				PET/Yoga Teacher/HWC
4.3.3.Strand 3				SEWA Coordinator [Any teacher]
Fitness Tests				PET
Total		200	100	

The strands conceptualized will be assessed internally through a blended approach of self-assessment and teacher assessment.Students will be assessed in each of the strands on the basis of evidence such as -direct observation, checklists, and/or use of video. In case of SEWA Projects Students plan and conduct projects and communicate their findings. Evidence in this case can include journals, diaries, essays, laboratory reports, oral presentations and/or the use of video, etc.Maximum marks allotted for each strand are given in table 1.1. SEWA can be assessed on the basis of the rubric developed by the class teacher for the project chosen by the class for that year.The Board will be inspecting records for Strand 1 and 2 such as attendance and participation by all students. Evidence such as Portfolios, Journals, Essays,Video recordings

etc. in case of SEWA may be kept ready for scrutiny by theCBSE at any time during the year.Schools are encouraged to place the activities they undertake under various strands on their own website under the 'Sports Corner' which should be updated at regular intervals.

4.PHYSICAL FITNESS TEST BATTERY

Fitness Tests may be conducted as per the guidelines of Khelo India fitness tests and the data may be uploaded on Khelo India App which helps the country in early talent identification for support .The Khelo india app also helps the school to generate individual reports with recommendations for intervention which will help the children in maintaining fitness.
The following components are to be considered for fitness assessment of Grade XI and XII

Battery of Tests - Mandatory	**Battery of Tests- Optional***
1.Body Composition (BMI)	1.Flexed Bent Arm Hang
2. Strength-A]Abdominal (Partial Curl-up)	2.Flamingo Balance Test
2.Strength-B]. Muscular Endurance (Push Ups for Boys, Modified Push Ups for Girls)	3.Shuttle Run
3.Flexibility (Sit and Reach Test)	4.Sprint/Dash
4. Cardiovascular Endurance (600 Meter Run/Walk)	5.Standing Vertical Jump
5. Speed (50 mt. Dash)	6.Plate Tap Test
	7.Alternative Hand Wall Toss Test

*Schools targeting higher levels of fitness may also consider the optional fitness tests suggested here. However, Mandatory tests are the minimum tests to be covered by each school every year

Test Descriptions for conducting fitness tests
Schools may refer to the test descriptions prepared by Sports Authority of India for Khelo India fitness assessment as the description is prepared for Indian context. For video tutorials on how to conduct these tests and how to upload the data and generate individual reports schools may visit https://schoolfitness.kheloindia.gov.in/UploadedFiles/SampleData/AdminManual.pdf

5. COURSE CONTENT UNDER STRAND 1

Any one or more games or activities out of Athletics/ Swimming, Team Games, Individual Games , Adventure Sports and indigenous games must be taken up by each student as an individual, or as a class team or as a school team. Once selected the children are supposed to focus on learning the following aspects

1. Developing skills and using them to improve the overall success of a performance (DS)
2. Using different strategies and tactics to win events (S&T)
3. Having the physical fitness and mental capacity needed to carry out the demands of the activity (P&M)
4. Knowing what they do well and what they need to practice in order to improve further (IM)

6. ASSESSMENT OF HEALTH AND PHYSICAL EDUCATION

Assessment of Health and Physical Education may be continuously done by collecting information, reflecting on and using that information to review children's progress and to plan future learning experiences. The documented data, after interpretation, should be reflected in the Report Card of the children in the form of grades. In the existing scheme of assessment, these activities will be graded on a 9- point grading scale (A to E) for classes XI-XII and will have no descriptive indicators. Work Experience is subsumed in Physical and Health Education. No upscaling of grades will be done. The concerned teacher would make an objective assessment of the level of performance/ participation demonstrated by a student throughout a year and finally assign grades .While assessing the children the following aspects may be considered and weightage may be given as per its relevance.

Knowledge-The objective method of setting a paper can be used in which there will be one word answers, true and false and matching.

Skills -The skills that are taught can be tested using the reciprocal method

Application of skills-. Application of skills during game situation in INTRA section matches and for application of skill during INTRA class matches may be considered

While the students are engaged in the core areas like Health and Physical Education, the process is as important as the product. Hence, the assessment in these areas should take account of both aspects. The basis of assessment has been suggested below

Area	Process	Product
Health and Physical Education including Work Experience	Participation, team- spirit, commitment and honest effort	Overall fitness

While filling online data for strand 1,following grades may be filled against HPE:ClassXI-XII:Grade (A-E)on **9-point scale (A1,A2,B1,B2,C1,C2,D1,D2,E)**

While filling online data,following grades of SEWA shall be filled against Work Education / Work Experience:Class XI-XII: Grade (A-E) on **9-point scale (A1,A2,B1,B2,C1,C2,D1,D2,E)**

7.SAMPLE QUESTIONS

Sample questions to conduct the assessment of the knowledge aspect are made available .The questions are suggestive only. However, the schools must not make this assessment stressful for children. Questions related to the activity/game selected by the child may be assessed orally as a quiz or with multiple choice questions.

8. DIVYANG [CHILDREN WITH SPECIAL NEEDS]

Teachers are expected to intervene positively to ensure participation of each and every child in the class,including CWSNThe students must find unique and creative ways to include CWSN who are their classmates. Though few of the strategies for inclusion have been outlined for some games in boxes attached below, if movement is not possible at all, then aided umpiring or aided cheering should be considered for CWSN. If some learning is possible, let the CWSN learn about the intricacies of the game. If they are interested in art work or music, let them create their own version of the game in art or music or any other form. Students are free to innovate their own mechanisms for inclusion under the guidance of their class teachers.Students must acknowledge that they have a responsibility towards the less privileged, the disadvantaged, the CWSN (Divyang), the society, and the environment. The principle of giving to society has to become second nature to them.

9. PRESCRIBED TEXTBOOKS [RESOURCES]

1. Comprehensive School Health Manuals (brought out in four volumes by the Board in 2005, revised in 2010). (Available under Resources)

2. Resources for transacting PE by providing linkages across subjects at the Pre Primary, and Primary level are already available in Physical Education Cards brought out for teachers and students. (Available under Resources)

3. PE Cards are also available for differently-abled children as PEC ability cards and also for secondary level (SPEC). (Available under Resources)

4. Life Skills Manuals for Primary, Middle and Secondary have activities and themes for transaction of PE across classes in age appropriate ways. (Available under Resources)

5. Training and Resource Materials-Health and Wellness of School Going Children under the aegis of School Health Program of Ayushman Bharath [Available under Resources)

ANNEXURES

Annexure 1 - Health and Activity Card

School Logo **CBSE Logo**

HEALTH AND ACTIVITY CARD
GENERAL INFORMATION

Aadhar Card no of Student (optional):……
NAME:……
ADMISSION NO:……DATE OF BIRTH:……**….**
M F T:……..
BLOODGROUP:…….

MOTHER'S NAME
:……
YOB :…….. WEIGHT
:…… HEIGHT:……
BLOOD GROUP:……
AADHAR CARD NO.
:……

FATHER'S NAME:……
YOB :…….. WEIGHT
:…… HEIGHT:……
BLOOD GROUP:……
AADHAR CARD NO.
:……

FAMILY MONTHLY INCOME
:……
ADDRESS
:……

……

……

PHONE NO. (M)

:……

CWSN, SPECIFY

:……

SIGNATURE OF PARENTS/ GUARDIAN DATE:

This information should not be shared with any third party/agency in any case.Privacy must be ensured

HEALTH AND ACTIVITY RECORD

Components	Parameters	Class 9th	Class 10th	Class 11th	Class 12th
Vision	RE/ LE				
Ears	Left/ Right				
Teeth Occlusion	Caries/ Tonsils/ Gums				
General Body Measurements	Height				
	Weight				
Circumferences	Hip				
	Waist				
Health Status	Pulse				
	Blood Pressure				
Posture Evaluation	If any: Head Forward/ Sunken Chest/ Round Shoulders/ Kyphosis/ Lordosis/ Abdominal Ptosis/ Body Lean/ Tilted Head/ Shoulders Uneven/ Scoliosis/ Flat Feet/ Knock Knees/ Bow Legs				
Sporting Activities (HPE) (For details, see HPE manual available on CBSE website www.cbseacademic.in)	**Strand 1:** Any one of following: 1. Athletics/ Swimming 2. Team Game 3. Individual Game 4. Adventure Sports				
	Strand 2: **Health and Fitness** *(Mass PT, Yoga, Dance, Calisthenics, Jogging, Cross Country Run, Working outs using weights/gym equipment, Tai-Chi etc)*				
	Strand 3: **SEWA**				

*The circumference measurement of hip and waist of girls must be taken only by lady teachers

HEALTH AND ACTIVITY RECORD

Fitness Components	Fitness Parameters		Test Name	What does it Measure	Class 9th	Class 10th	Class 11th	Class 12th
Health Components	Body Composition		**BMI**	Body Mass Index for specific Age and Gender				
	Muscular Strength	Core	**Partial Curl up**	Abdominal Muscular Endurance				
		Upper Body	**Push Up**	Muscular Endurance				
	Flexibility		**Sit and Reach**	Measures the flexibility of the lower back and hamstring muscles				
	Endurance		**600 Meter Run**	Cardiovascular Fitness/ CardiovascularEndurance				
	Balance	Static Balance	**Flamingo Balance Test**	Ability to balance successfully on a single leg				
Skill Components	Agility		**Shuttle Run**	Test of speed and agility				
	Speed		**Sprint/ Dash**	Determines acceleration and Speed				
	Power		**Standing Vertical Jump**	Measures the Leg Muscle Power				
	Coordination		**Plate Tapping**	Tests speed and coordination of limb movement				
			Alternative Hand Wall Toss Test	Measures hand-eye coordination				

Highlighted tests are mandatory.Details regarding how to conduct tests are available at https://schoolfitness.kheloindia.gov.in/UploadedFiles/SampleData/AdminManual.pdf

Mainstreaming Health and Physical Education

Health and Physical Education is concerned with the total health of the learner and the community. Besides physical health, it includes mental and emotional health of the learners. Health is often a state of physical, mental, emotional, social and spiritual well-being and not merely the absence of disease or infirmity

The aim of Mainstreaming Health and Physical Education is to enable the student to attain an optimum state of health, by incorporating each of the aforementioned aspects.

A comprehensive view of Health and Physical Education includes and encompasses the three areas of Health Education, Physical Education and Yoga as integral to achieving holistic health (physical, mental, intellectual, emotional, social and spiritual). Given the interdisciplinary nature of this subject, it needs to be transacted in innovative ways across the curriculum

DISTRIBUTION OF MARKS FOR INTERNAL ASSESSMENT

Strand	Marks	Periods (Approx)	Levels*
1. GAMES **A)** Athletics/ Swimming **B)** Team Games **C)** Individual Games/ Activity **D)** Adventure Sports **E)** Indigenous Games	50 marks	90 periods	**Up to 25 marks:** Learning **26-40 marks**: Proficiency **41-50 marks**: Advanced
2. Health and Fitness	25 Marks	50 periods	**Up to 12 marks:** Learning **13-20 marks**: Proficiency **21-25 marks**: Advanced
3. SEWA	25 Marks	50 periods	**Up to 12 marks:** Learning **13-20 marks**: Proficiency **21-25 marks**: Advanced
4. Health and Activity Card	No Marks	10 periods	-
Total	**100 Marks**	**200 Periods**	-

*The grades/levels obtained under the first three Stands will be reflected in the report card

Annexure 2 - SEWA Mentor Observation Form

SCHOOL NAME

MENTOR OBSERVATION

Attendance:……
……

Involvement:……
……

Regularity:……
……

Commitment:……
……

Additional

Comments:……
……

……..……

……

……

SCHOOL NAME
MY SEWA PROMISE FORM

Dear Student,

SEWA is a firm step to prepare you for life . It is a voluntary project experience. You have to complete my SEWA Promise Form and obtain prior approval for the activity /project. Selection of a SEWA activity, development, implementation of the proposal and evaluation of the activity is the responsibility of each student. Signature of the parent indicates review and approval of this proposal.

Student's Name:……..……Class :…….

BRIEF DESCRIPTION OF THE ACTIVITY

Duration [Days and Time] ..... Estimated Hours :.....

Name of Mentor Teacher

:.....

Student Signature :.....

Date.....

Parent Signature

:.....Date.....

Annexure 4 -SEWA Hour Log

SCHOOL NAME

SEWA HOUR LOG

STUDENT NAME:_____

PROJECT :_____

Date	Activity	Hours	Mentor's Signature

Annexure 4 -SEWA Hourly Schedule

SCHOOL NAME

SEWA HOURLY SCHEDULE

Hour Count	**Date and Day**	**Proposed activity plan**
Hour 1		
Hour 2		

Hour 3		
Hour 4		
Hour 5		
Hour 6		

Annexure 5 -SEWA Self Appraisal Form

SEWA SELF APPRAISAL FORM

The following questions should be addressed at the end of each activity/project. These are guiding questions. Candidates can either answer on this form or write a reflective, continuous text incorporating responses to these questions.

My Name_____

My Activity / Project_____

My Commitment Towards the Project/ Activity

_____

_____

This Activity/ Project has been a great learning experience because

_____

I initially felt that the project could not have achieved its outcomes because

The project has definitely changed me as a person in terms of behavior, attitude and life skills because

The details of the beneficiary(ies). Any significant comment received from them; please quote

The challenges I faced and the things I might do differently next time so as to improve?

SCIENCE
Subject Code – 086
Classes IX and X (2025-26)

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

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

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

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

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

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

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

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

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

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

General Instructions for Assessment:

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

scientific investigations etc. and use of rubrics for assessing them objectively. This will also have a weightage of 05 marks towards the final result.

ii) For 5 marks - Practical / Laboratory work that is done throughout the year. The students should maintain record of the same. Practical Assessment should be continuous. All practical work listed in the syllabus must be completed.

iii) For 5 marks - Portfolio that includes classwork and other sample of student's work.

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

Time: 03 Hours **Marks: 80**

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

Theme: Materials

Unit I: Matter-Nature and Behaviour

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

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

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

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

Theme: The World of the Living

Unit II: Organization in the Living World

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

Tissues, Organs, Organ System, Organism:

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

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

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

Theme: Moving Things, People and Ideas

Unit III: Motion, Force and Work

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

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

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

Elementary idea of conservation of Momentum

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

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

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

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

Theme: Food

Unit IV: Food Production

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

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

PRACTICALS

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

(LIST OF EXPERIMENTS)

1. Preparation of: **Unit-I**

a) a true solution of common salt, sugar and alum

b) a suspension of soil, chalk powder and fine sand in water

c) a colloidal solution of starch in water and egg albumin/milk in water and distinguishbetween these on the basis of

- transparency
- filtration criterion
- stability

2. Preparation of **Unit-I**

a) A mixture

b) A compound

using iron filings and sulphur powder and distinguishing between these on the basis of:

- appearance, i.e., homogeneity and heterogeneity

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

3. Perform the following reactions and classify them as physical or chemical changes: **Unit-I**

a) Iron with copper sulphate solution in water
b) Burning of magnesium ribbon in air
c) Zinc with dilute sulphuric acid
d) Heating of copper sulphate crystals
e) Sodium sulphate with barium chloride in the form of their solutions in water

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

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

6. Determination of the melting point of ice and the boiling point of water. **Unit-I**

7. Verification of the laws of reflection of sound. **Unit-III**

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

9. Establishing the relation between the loss in weight of a solid when fully immersed in **Unit-III**

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

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

11. Verification of the law of conservation of mass in a chemical reaction. **Unit-III**

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

Time: 03 Hours **Marks: 80**

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

Theme: Materials

Unit I: Chemical Substances - Nature and Behaviour

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

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

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

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

Theme: The World of the Living

Unit II: World of Living

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

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

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

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

Theme: Natural Phenomena

Unit III: Natural Phenomena

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

Refraction; Laws of refraction, refractive index.

Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivationnot required); Magnification. Power of a lens.

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

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

Theme: How Things Work

Unit IV: Effects of Current

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

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

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

Theme: Natural Resources

Unit V: Natural Resources

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

Note for the Teachers:

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

PRACTICALS

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

LIST OF EXPERIMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PRESCRIBED BOOKS:

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

Question Paper Design (Theory)

Class X (2025-26)

Science (086)

Theory (80 marks)

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

Note:

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

Internal Assessment (20 Marks)

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

Suggestive verbs for various competencies

- **Demonstrate Knowledge and Understanding**

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

- **Application of Knowledge/Concepts**

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

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

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

Mathematics
Subject Code – 041 & 241
Classes IX-X (2025 – 26)

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	10
II	ALGEBRA	20
III	COORDINATE GEOMETRY	04
IV	GEOMETRY	27
V	MENSURATION	13
VI	STATISTICS	06
	Total	**80**

S. No.	Content	Competencies	Explanation
Unit 1: Number Systems			
1.	**REAL NUMBERS** 1. 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. 2. 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. 3. Definition of nth root of a real number. 4. Rationalization (with precise meaning) of real numbers of the type $\frac{1}{a+b\sqrt{x}}$ and $\frac{1}{\sqrt{x}+\sqrt{y}}$ (and their combinations), where x and y are natural numbers and a and b are integers.	• Develops a deeper understanding of numbers, including the set of real numbers and its properties. • Recognizes and appropriately uses powers and exponents. • Computes powers and roots and applies them to solve problems.	• Differentiates rational and irrational numbers based on decimal representation. • Represents rational and irrational numbers on the number line. • Rationalizes real number expressions such as $\frac{1}{a+b\sqrt{x}}$ and $\frac{1}{\sqrt{x}+\sqrt{y}}$, where x, y are natural numbers and a, b are integers. • Applies laws of exponents

	5. Recall of laws of exponents with integral powers. Rational exponents with positive real bases (to be done by particular cases, allowing learner to arrive at the general laws.)		
UNIT II: ALGEBRA			
1.	**POLYNOMIALS** 1. Definition of a polynomial in one variable, with examples and counter examples. Coefficients of a polynomial, terms of a polynomial and zero polynomial. 2. Degree of a polynomial. 3. Constant, linear, quadratic and cubic polynomials. Monomials, binomials, trinomials. Factors and multiples. 4. Zeroes of a polynomial. 5. Motivate and State the Remainder Theorem with examples. 6. Statement and proof of the Factor Theorem. Factorization of $ax^2 + bx + c$, $a \neq 0$ where a, b and c are real numbers, and of cubic polynomials using the Factor theorem. 7. Recall of algebraic expressions and identities. Verification of identities: $(x + y + z)^2 = x^2 + y^2 + z^2 + 2xy + 2yz + 2zx$ $(x \pm y)^3 = x^3 \pm y^3 \pm 3xy(x \pm y)$ $x^3 + y^3 = (x + y)(x^2 - xy + y^2)$ $x^3 - y^3 = (x - y)(x^2 + xy + y^2$ $x^3 + y^3 + z^3 - 3xyz = (x + y + z)(x^2 + y^2 + z^2 - xy - yz - zx)$ and their use in factorization of polynomials.	• Learns the art of factoring polynomials.	• Defines polynomials in one variable. • Identifies different terms and different types of polynomials. • Finds zeros of a polynomial • Proves factor theorem and applies the theorem to factorize polynomials. • Proves and applies algebraic identities up to degree three.
2.	**LINEAR EQUATIONS IN TWO VARIABLES** 1. Recall of linear equations in one variable. 2. Introduction to the equation in two variables. Focus on linear equations of the type ax + by + c = 0.	• Visualizes solutions of a linear equation in two variables as ordered pair of real numbers on its graph	• Describes and plot a linear equation in two variables.

	Explain that a linear equation in two variables has infinitely many solutions and justify their being written as ordered pairs of real numbers, plotting them and showing that they lie on a line.		
UNIT III: COORDINATE GEOMETRY			
1.	**Coordinate Geometry:** 1. The Cartesian plane, coordinates of a point 2. Names and terms associated with the coordinate plane, notations.	• Specifies locations and describes spatial relationships using coordinate geometry.	• Describes cartesian plane and its associated terms and notations
UNIT IV: GEOMETRY			
1.	**INTRODUCTION TO EUCLID'S GEOMETRY** 1. 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. 2. The five postulates of Euclid. Equivalent versions of the fifth postulate. Showing the relationship between axiom and theorem, for example: (a) Given two distinct points, there exists one and only one line through them. (Axiom) (b) (Prove) Two distinct lines cannot have more than one point in common. (Theorem)	• Proves theorems using Euclid's axioms and postulates– for triangles, quadrilaterals, and circles and applies them to solve geometric problems.	• Understands historical relevance of Indian and Euclidean Geometry. • Defines axioms, postulates, theorems with reference to Euclidean Geometry.
2.	**LINES AND ANGLES** 1. (State without proof) If a ray stands on a line, then the sum of the two adjacent angles so formed is $180°$ and the converse. 2. (Prove) If two lines intersect, vertically opposite angles are equal. 3. (State without proof) Lines which are parallel to a given line are parallel.	• derives proofs of mathematical statements particularly related to geometrical concepts, like parallel lines by applying axiomatic approach and solves problems using them.	• Visualizes, explains and applies relations between different pairs of angles on a set of parallel lines and intersecting transversal.

			• Solves problems based on parallel lines and intersecting transversal.
3.	**TRIANGLES** 1. (State without proof) Two triangles are congruent if any two sides and the included angle of one triangle is equal (respectively) to any two sides and the included angle of the other triangle (SAS Congruence). 2. (Prove) Two triangles are congruent if any two angles and the included side of one triangle is equal (respectively) to any two angles and the included side of the other triangle (ASA Congruence). 3. (State without proof) Two triangles are congruent if the three sides of one triangle are equal (respectively) to three sides of the other triangle (SSS Congruence). 4. (State without proof) Two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle. (RHS Congruence). 5. (Prove) The angles opposite to equal sides of a triangle are equal. 6. (State without proof) The sides opposite to equal angles of a triangle are equal.	• Describe relationships including congruency of two-dimensional geometrical shapes (lines, angle, triangles) to make and test conjectures and solve problems. • derives proofs of mathematical statements particularly related to geometrical concepts triangles by applying axiomatic approach and solves problems using them.	• Visualizes and explains congruence properties of two triangles. • Applies congruency criteria to solve problems
4.	**QUADRILATERALS** 1. (Prove) The diagonal divides a parallelogram into two congruent triangles. 2. (State without proof) In a parallelogram opposite sides are equal, and conversely. 3. (State without proof) In a parallelogram opposite angles are equal, and conversely.	• derives proofs of mathematical statements particularly related to geometrical concepts of quadrilaterals by applying axiomatic approach and solves problems using them.	• Visualizes and explains properties of quadrilaterals • Solves problems based on properties of quadrilaterals.

	4. (State without proof) A quadrilateral is a parallelogram if a pair of its opposite sides is parallel and equal. 5. (State without proof) In a parallelogram, the diagonals bisect each other and conversely. 6. (State without proof) In a triangle, the line segment joining the mid points of any two sides is parallel to the third side and is half of it and (State without proof) its converse.		
5.	**CIRCLES** 1. (Prove) Equal chords of a circle subtend equal angles at the center and (State without proof) its converse. 2. (State without proof) The perpendicular from the center of a circle to a chord bisects the chord and conversely, the line drawn through the center of a circle to bisect a chord is perpendicular to the chord. 3. (State without proof) Equal chords of a circle (or of congruent circles) are equidistant from the center (or their respective centers) and conversely. 4. (Prove) The angle subtended by an arc at the center is double the angle subtended by it at any point on the remaining part of the circle. 5. (State without proof) Angles in the same segment of a circle are equal. 6. (State without proof) If a line segment joining two points subtends equal angle at two other points lying on the same side of the line containing the segment, the four points lie on a circle. 7. (State without proof) The sum of either of the pair of the opposite angles of a cyclic quadrilateral is 180° and its converse.	• Proves theorems about the geometry of a circle, including its chords and subtended angles	• Visualizes and explains properties of circles. • Solves problems based on properties of circle.

UNIT V: MENSURATION			
1.	**AREAS** 1. Area of a triangle using Heron's formula (without proof)	• Visualizes, represents, and calculates the area of a triangle using Heron's formula.	• States and applies Heron's Formula to find area of a triangle.
2.	**SURFACE AREAS AND VOLUMES** 1. Surface areas and volumes of spheres (including hemispheres) and right circular cones.	• Visualizes and uses mathematical thinking to discover formulas to calculate surface areas and volumes of solid objects (spheres, hemispheres and right circular cones)	• Solves problems based on surface areas and volumes of three-dimensional shapes (spheres/hemi-sphere, right circular cones).
UNIT VI: STATISTICS			
1.	**STATISTICS** 1. Bar graphs 2. Histograms (with varying base lengths) 3. Frequency polygons.	• Draws and interprets bar graph, histogram and frequency polygon	• Represents data using Bar Graph, Histogram and frequency polygon.

MATHEMATICS QUESTION PAPER DESIGN

CLASS – IX (2025-26)

Time: 3 Hrs. **Max. Marks: 80**

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

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

CLASS – IX (2025-26)

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

S. No.	Content	Competencies	Explanation
	UNIT II: ALGEBRA		
1.	**LINEAR EQUATIONS IN TWO VARIABLES** 1. Graph of linear equations in two variables. 2. Examples, problems from real life, including problems on Ratio and Proportion and with algebraic and graphical solutions being done simultaneously.	• Visualizes solutions of a linear equation in two variables as ordered pair of real numbers on its graph.	• Describes and plot a linear equation in two variables. • Exemplifies a linear equation in two variables and its possible solutions using real life examples.
	UNIT III: COORDINATE GEOMETRY		
1.	**Coordinate Geometry:** 1. Plotting points in the plane.	• Specifies locations and describes spatial relationships using coordinate geometry, e.g., plotting points in a plane	• Plots/locates points in the plane.
	UNIT IV: GEOMETRY		
1.	**LINES AND ANGLES** 1. (State without proof) Results on corresponding angles, alternate angles, interior angles when a transversal intersects two parallel lines. 2. (Prove) The sum of the angles of a triangle is 180°. 3. (State without proof) If a side of a triangle is produced, the exterior angle so formed is equal to the sum of the two interior opposite angles.	• derives proofs of mathematical statements particularly related to geometrical concepts, like parallel lines by applying axiomatic approach and solves problems using them.	• Visualizes, explains and applies relations between different pairs of angles on a set of parallel lines and intersecting transversal. • Solves problems based on parallel lines and intersecting transversal. • Visualizes the relation between exterior and interior angles of a triangle.

2.	**TRIANGLES** 1. (State without proof) Triangle inequalities and relation between 'angle and facing side' inequalities in triangles.	• Derives proofs of mathematical statements particularly related to geometrical concepts in triangles by applying axiomatic approach and solves problems using them.	• Defines and applies triangle inequalities with reference to angles and sides
3.	**AREAS OF PARALLELOGRAMS AND TRIANGLES** 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. (State without proof) Triangles on the same base (or equal bases) and between the same parallels are equal in area.	• Find areas of all types of triangles by using appropriate formulae and apply them in real life situations	• Finds area of rectangle, parallelogram and triangle.
4.	**CIRCLES** 1. Through examples, arrive at definition of circle and related concepts-radius, circumference, diameter, chord, arc, secant, sector, segment, subtended angle. 2. (State without proof) There is one and only one circle passing through three given non-collinear points.	• Proves theorems about the geometry of a circle, including its chords and subtended angles	• Solves problems based on properties of circle.
5.	**CONSTRUCTIONS** 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.	• Constructs different geometrical shapes like bisectors of line segments, angles and their bisectors and triangles satisfying given constraints.	• Constructs line-segments, bisectors of line-segments, angles and triangle with given conditions.

UNIT V: MENSURATION			
1.	**AREAS** 1. Application of heron's formula in finding the area of a quadrilateral.	• Visualizes, represents, and calculates the area of a triangle using Heron's formula.	• States and applies Heron's Formula to find area of a quadrilateral.
2.	**SURFACE AREAS AND VOLUMES** 1. Surface areas and volumes of cubes, cuboids and right circular cylinders.	• Visualizes and uses mathematical thinking to discover formulas to calculate surface areas and volumes of solid objects (cubes, cuboids and right circular cylinders)	• Solves problems based on surface areas and volumes of three-dimensional shapes (cube, cuboid and right circular cylinders).
UNIT VI: STATISTICS			
1.	**STATISTICS** 1. Introduction to Statistics: Collection of data, presentation of data — tabular form, ungrouped / grouped data. 2. Mean, median and mode of ungrouped data.	• Applies measures of central tendencies such as mean, median and mode of ungrouped data.	• Organizes raw data in tabular form. • Calculates mean, median, mode of ungrouped data
2.	**PROBABILITY** 1. History, Repeated experiments and observed frequency approach to probability. Focus is on empirical probability. (A large amount of time to be devoted to group and to individual activities to motivate the concept); 2. The experiments to be drawn from real - life situations, and from examples used in the chapter on statistics).	• Applies concepts from probability to solve problems on the likelihood of everyday events.	• Conceptualizes probability using repeated experiments and observed frequencies.

COURSE STRUCTURE CLASS –X

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

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

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

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

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

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

MATHEMATICS- STANDARD (Code – 041)

QUESTION PAPER DESIGN

CLASS – X (2025-26)

Time: 3 Hours **Max. Marks: 80**

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

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

MATHEMATICS-BASIC (Code – 241)

QUESTION PAPER DESIGN

CLASS – X (2025-26)

Time: 3Hours **Max. Marks: 80**

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

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

PRESCRIBED BOOKS:

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

HEALTH AND PHYSICAL EDUCATION

GRADE IX AND X - 2025-26

The development of capacities that promote student wellness such as fitness, good health, psycho-social well-being, and sound ethical grounding are also critical for high-quality learning

-National Education Policy 2020

CENTRAL BOARD OF SECONDARY EDUCATION

ACADEMIC UNIT, SHIKSHA SADAN, 17, ROUSE AVENUE NEW DELHI - 110002

HEALTH AND PHYSICAL EDUCATION / IX-X /2024-2025

Health and Physical Education focuses on holistic development, both mental and physical, understanding the importance of physical fitness, health, wellbeing and the factors that contribute to them. Focus of this area is on helping children develop a positive attitude and commitment to lifelong, healthy active living and the capacity to live satisfying, productive lives with the help of health management, indigenous sports, Yoga, NCC, self-defense, fitness and lifestyle choices.

Health and Physical Education focuses on holistic development, both mental and physical, understanding the importance of physical fitness, health, wellbeing and the factors that contribute to them. Focus of this area of curriculum is on helping children develop a positive attitude and commitment to life long, healthy and active living and the capacity to live satisfying, productive lives with the help of health, hygiene and sanitation, work experience, indigenous sports, yoga, NCC, self-defense, fitness and lifestyle choices. Health and Physical Activities, preferably sports must be given one regular period per day. Students should be provided opportunities to get professionally trained in the area of their interest. Indigenous sports, yoga and NCC must be encouraged in the schools as they develop physical fitness, discipline, sportsmanship combined with patriotism, self-sacrifice and health care. Similarly, Self-defense may be actively taught to students, especially girl students, as it instills confidence and empowers them. The teachers should ensure that the students get opportunities to participate in activities of their choice and help them in identifying and nurturing their talents and gaining confidence. The Physical Education teacher will maintain the record of all the Health and Physical Education activities/competitions that each of the children participate in. The Comprehensive School Health Manuals (four volumes) brought out by CBSE could be referred to for detailed information and the graded activities could be taken up as part of thecurriculum in school.

To address the Health aspect of HPE, qualified doctors should examine children once in a year along with a follow-up session during the year. School should also bring any noticeable disability in a student to the notice of the school counselor and parents. Cases of special needs of students with medical history must be carefully noted and handled accordingly. Detailed information on the Comprehensive Physical and Health Education Curriculum is enclosed with this document.

1. BACKGROUND/ RATIONALE

1.1.1 Health and Physical Education is concerned with the total health of the learner and the community. Besides physical health, it includes mental and emotional health of the learners. Health is often a state of physical, mental, emotional, social and spiritual well-being and not merely the absence of disease or infirmity.

1.1.2 The aim of Mainstreaming Health and Physical Education is to enable the student to attain an optimum state of health, by incorporating each of the aforementioned aspects.
1.1.3 In this respect, it is a truism to say that the practice of healthy living will serve as the foundation for Physical Education. It is envisaged that any effort to promote aesthetic values at the school level will include a natural esteem for physical well-being. The mastery of the body, its powers and qualities, requires knowledge, methodical training and exercise. The skills and capacities need to be developed, the muscles and nerves trained, the senses cultivated and hygienic and proper dietary habits inculcated for this purpose.
1.1.4 Therefore, provision has to be made much more systematically than before, in the school curriculum for Health and Physical Education imbued with Life Skills
1.1.5 Research has demonstrated that there is a positive correlation between brain development and exercise which also has an impact on cognitive development thus helping to improve academic grades.
1.1.6 A comprehensive view of Health and Physical Education includes and encompasses the three areas of Health Education, Physical Education and Yoga as integral to achieving holistic health (physical, mental, intellectual, emotional, social and spiritual). Given the interdisciplinary nature of this subject, it needs to be transacted in innovative ways across the curriculum.

1.1.7 The ubiquitous digital presence can be an added resource for the student, teacher educator and the teacher. It provides endless possibilities of resorting to online resources to add value to PE.

1.1.8 At the Secondary level acquisition of the habits of healthy living and participation in games and sports and athletics for neuromuscular coordination and physical fitness are the aims which should be taken care of while developing any syllabus of Health and Physical Education.

1.1.9 While at the Senior Secondary level, through the integrated PE approach, students will acquire the knowledge, skills, right attitudes and values towards the pursuit of a lifelong physically active and healthy lifestyle.

2. LEARNING OBJECTIVES

1.2.1 To develop awareness regarding the importance of physical fitness in individual and social life including Life Skills.

1.2.2 To bring the overall awareness of values with regard to personal health and fitness, and to inculcate among students the desired habits and attitudes towards health to raise their health status. *

1.2.3 To make the pupils physically, mentally and emotionally fit and to develop suchpersonal and social qualities that will help them to be good human beings. *

1.2.4 To take action individually and collectively to protect and promote (i) own health (ii) health of family members: and (iii) health of the surrounding community andseeking help when required from available community resources. *

1.2.5 To develop interest in exercise, sports and games for self-satisfaction and make it a part of life;

1.2.6 To enable an individual to enhance inner qualities - self-mastery, discipline,courage, confidence and efficiency. *

1.2.7 To enable an individual to display a sense of responsibility, patriotism, self-sacrificeand service to the community *

1.2.8 To develop awareness of the importance of self-defense. *

1.2.9 To create awareness among children about rules of safety in appropriate hazardous situations to avoid accidents and injuries. To acquaint them with first-aid measures about common sickness and injuries. *

1.2.10 To help children learn correct postural habits in standing, walking, running, sitting and other basic movements so as to avoid postural defects and physical deformities. *

1.2.11 To help children grow as responsible citizens by inculcating in them certain social and moral values through games, sports, Red Cross, Scouts and Guides etc. *

1.2.12 To inculcate values and skills in children in order to promote self-control, concentration, peace and relaxation to avoid the ill effects of stress, strain and fatigue of routine everyday life. *

1.2.13 To address the physical, psycho-social needs of CWSN (Children with Special Needs) in an integrated fashion. *

1.2.14 To seek in instilling self-worth thus helping students to become confident, assertive, emotionally stable, independent and self-controlled. *

1.2.15 To help release of emotional stress, anxiety and tension, leading to a reduced risk of depression. *

1.2.16 To help strengthen peer relationships, social bonding, buddy mentorship and team camaraderie.

1.2.17 To develop more positive attitude towards challenges, winning and losing, thus preparing students for life and for the workplace. *

* Values Integrated across HPE

3. COURSE STRUCTURE

Strand	Strand Name	No. of periods	Marks allotted	Teacher/Person Responsible
1	Games/Sports* 1.Athletics/Swimming 2.Team Games 3.Individual Games 4.Adventure Sports 5.Indigenous Games	90	50	PE Teacher
2	Health and Fitness 1.Physical Health 2.Social Health 3.Emotional Health	50	25	PE Teacher Yoga Teacher Health and Wellness Coordinator Counselor
3	SEWA	50	25	SEWA Coordinator [Any Subject]
4	Health and Activity Card	10		Class Coordinator
4.1.Physical Check up				Qualified Doctor
4.2.Posture Evaluation				Physiotherapist/Nurse
4.3.Sporting Activities				
4.3.1.Strand 1				PET
4.3.2.Strand 2				PET/Yoga Teacher/HWC
4.3.3.Strand 3				SEWA Coordinator [Any teacher]
Fitness Tests				PET
Total		200	100	

The strands conceptualized will be assessed internally through a blended approach of self-assessment and teacher assessment. Students will be assessed in each of the strands on thebasis of evidence such as -direct observation, checklists, and/or use of video. In case of SEWA Projects Students plan and conduct projects and communicate their findings. Evidence in this case can include journals, diaries, essays, laboratory reports, oral presentations and/or the use ofvideo, etc. Maximum marks allotted for each strand are given in table 1.1. SEWA can be assessed on the basis of the rubric developed by the class teacher for the project chosen by the class for that year. The Board will be inspecting records for Strand 1 and 2 such as attendance and participation by all students. Evidence such as Portfolios, Journals, Essays, Video recordings etc. in case of SEWA may be kept ready for scrutiny by the CBSE at any time during the year. Schools are encouraged to place the activities they undertake under various strands on their own website under the 'Sports Corner' which should be updated at regular intervals.

4.PHYSICAL FITNESS TEST BATTERY

Fitness Tests may be conducted as per the guidelines of Khelo India fitness tests and the data may be uploaded on Khelo India App which helps the country in early talent identification for support. The Khelo india app also helps the school to generate individual reports with recommendations for intervention which will help the children in maintaining fitness.
The following components are to be considered for fitness assessment of Grade IX and X.

Battery of Tests - Mandatory	Battery of Tests- Optional*
1.Body Composition (BMI)	1.Flexed Bent Arm Hang
2. Strength-A]Abdominal (Partial Curl-up)	2.Flamingo Balance Test
2.Strength-B]. Muscular Endurance (Push Ups for Boys, Modified Push Ups for Girls)	3.Shuttle Run
3.Flexibility (Sit and Reach Test)	4.Sprint/Dash
4. Cardiovascular Endurance (600 Meter Run/Walk)	5.Standing Vertical Jump
5. Speed (50 mt. Dash)	6.Plate Tap Test
	7.Alternative Hand Wall Toss Test

*Schools targeting higher levels of fitness may also consider the optional fitness tests suggested here. However, Mandatory tests are the minimum tests to be covered by each school every year

Test Descriptions for conducting fitness tests
Schools may refer to the test descriptions prepared by Sports Authority of India for Khelo India fitness assessment as the description is prepared for Indian context. For video tutorials on how to conduct these tests and how to upload the data and generate individual reports schools may visit https://schoolfitness.kheloindia.gov.in/UploadedFiles/SampleData/AdminManual.pdf

5. COURSE CONTENT UNDER STRAND 1

Any one or more games or activities out of Athletics/ Swimming, Team Games, Individual Games , Adventure Sports and indigenous games must be taken up by each student as an individual, or as a class team or as a school team. Once selected the children are supposed to focus on learning the following aspects

1. Developing skills and using them to improve the overall success of a performance (DS)
2. Using different strategies and tactics to win events (S&T)
3. Having the physical fitness and mental capacity needed to carry out the demands of the activity (P&M)
4. Knowing what they do well and what they need to practice in order to improve further (IM)

6. ASSESSMENT OF HEALTH AND PHYSICAL EDUCATION

Assessment of Health and Physical Education may be continuously done by collecting information, reflecting on and using that information to review children's progress and to plan future learning experiences. The documented data, after interpretation, should be reflected in the Report Card of the children in the form of grades. In the existing scheme of assessment, these activities will be graded on a 5- point grading scale (A to E) for classes IX-X and will have no descriptive indicators. Work Experience is subsumed in Physical and Health Education. No upscaling of grades will be done. The concerned teacher would make an objective assessment ofthe level of performance/ participation demonstrated by a student throughout a year and finally assign grades. While assessing the children the following aspects may be considered and weightage may be given as per its relevance.

Knowledge-The objective method of setting a paper can be used in which there will be one word answers, true and false and matching.

Skills -The skills that are taught can be tested using the reciprocal method

Application of skills-. Application of skills during game situation in INTRA section matches and for application of skill during INTRA class matches may be considered

While the students are engaged in the core areas like Health and Physical Education, the process is as important as the product. Hence, the assessment in these areas should take account of both aspects. The basis of assessment has been suggested below

Area	Process	Product
Health and Physical Education including Work Experience	Participation, team- spirit, commitment and honest effort	Overall fitness

While filling online data for strand 1, following grades may be filled against HPE: Class IX-X: Grade (A-E) on 5-point scale (A, B, C, D, E)

Grades of SEWA is considered against Work Experience Class IX-X: Grade (A-E) on 5-point scale (A, B, C, D, E) separately

7.SAMPLE QUESTIONS

Sample questions to conduct the assessment of the knowledge aspect are made available. The questions are suggestive only. However, the schools must not make this assessment stressful for children. Questions related to the activity/game selected by the child may be assessed orally as aquiz or with multiple choice questions.

8. DIVYANG [CHILDREN WITH SPECIAL NEEDS]

Teachers are expected to intervene positively to ensure participation of each and every child in the class, including CWSN The students must find unique and creative ways to include CWSN who are their classmates. Though few of the strategies for inclusion have been outlined for some games in boxes attached below, if movement is not possible at all, then aided umpiring or aided cheering should be considered for CWSN. If some learning is possible, let the CWSN learn about the intricacies of the game. If they are interested in art work or music, let them create their own version of the game in art or music or any other form. Students are free to innovate their own mechanisms for inclusion under the guidance of their class teachers. Students must acknowledge that they have a responsibility towards the less privileged, the disadvantaged, the CWSN (Divyang), the society, and the environment. The principle of giving to society has to become second nature to them.

9. PRESCRIBED TEXTBOOKS [RESOURCES]

1. Comprehensive School Health Manuals (brought out in four volumes by the Board in 2005, revised in 2010). (Available under Resources)

2. Resources for transacting PE by providing linkages across subjects at the Pre Primary, and Primary level are already available in Physical Education Cards brought out for teachers and students. (Available under Resources)

3. PE Cards are also available for differently-abled children as PEC ability cards andalso for secondary level (SPEC). (Available under Resources)

4. Life Skills Manuals for Primary, Middle and Secondary have activities and themes for transaction of PE across classes in age appropriate ways. (Available under Resources)

5. Training and Resource Materials-Health and Wellness of School Going Children underthe aegis of School Health Program of Ayushman Bharath [Available under Resources)

ANNEXURES

Annexure 1 - Health and Activity Card

School Logo **CBSE Logo**

HEALTH AND ACTIVITY CARD
GENERAL INFORMATION

Aadhar Card no of Student (optional) : ……..
NAME:……
ADMISSION NO: ……. DATE OF BIRTH: ……..
M F T:……..BLOODGROUP:……

MOTHER'S NAME
:……
YOB :…….. WEIGHT
:…… HEIGHT:…….
BLOOD GROUP:…….
AADHAR CARD NO.
:……

FATHER'S NAME
:……
YOB :…….. WEIGHT
:…… HEIGHT:…….
BLOOD GROUP:…….
AADHAR CARD NO.
:……

FAMILY MONTHLY INCOME
:……
ADDRESS
:……

……

……

PHONE NO. (M)

:……

CWSN, SPECIFY

:……

SIGNATURE OF PARENTS/ GUARDIAN DATE:

This information should not be shared with any third party/agency in any case. Privacy must be ensured

HEALTH AND ACTIVITY RECORD

Components	Parameters	Class 9th	Class 10th	Class 11th	Class 12th
Vision	RE/ LE				
Ears	Left/ Right				
Teeth Occlusion	Caries/ Tonsils/ Gums				
General Body Measurements	Height				
	Weight				
Circumferences	Hip				
	Waist				
Health Status	Pulse				
	Blood Pressure				
Posture Evaluation	If any: Head Forward/ Sunken Chest/ Round Shoulders/ Kyphosis/ Lordosis/ Abdominal Ptosis/ Body Lean/ Tilted Head/ ShouldersUneven/ Scoliosis/ Flat Feet/ Knock Knees/ Bow Legs				
Sporting Activities (HPE) (For details, see HPE manual available on CBSE website www.cbseacademic.in)	**Strand 1:** Any one of following: 1. Athletics/ Swimming 2. Team Game 3. Individual Game 4. Adventure Sports				
	Strand 2: **Health and Fitness** *(Mass PT, Yoga, Dance, Calisthenics, Jogging, Cross Country Run, Working outs using weights/gym equipment, Tai-Chi etc)*				
	Strand 3: **SEWA**				

*The circumference measurement of hip and waist of girls must be taken only by lady teachers

HEALTH AND ACTIVITY RECORD

Fitness Components	Fitness Parameters		Test Name	What does it Measure	Class 9th	Class 10th	Class 11th	Class 12th
Health Components	Body Composition		**BMI**	Body Mass Index for specific Age and Gender				
	Muscular Strength	Core	**Partial Curlup**	Abdominal MuscularEndurance				
		Upper Body	**Push Up**	Muscular Endurance				
	Flexibility		**Sit and Reach**	Measures the flexibility ofthe lower back and hamstring muscles				
	Endurance		**600 Meter Run**	Cardiovascular Fitness/ Cardiovascular Endurance				
	Balance	Static Balance	**Flamingo Balance Test**	Ability to balance successfully on a single leg				
Skill Components	Agility		**Shuttle Run**	Test of speed and agility				
	Speed		**Sprint/ Dash**	Determines acceleration and Speed				
	Power		**Standing Vertical Jump**	Measures the Leg MusclePower				
	Coordination		**Plate Tapping**	Tests speed and coordination of limb movement				
			Alternative Hand Wall Toss Test	Measures hand-eyecoordination				

Highlighted tests are mandatory. Details regarding how to conduct tests are available at https://schoolfitness.kheloindia.gov.in/UploadedFiles/SampleData/AdminManual.pdf

Mainstreaming Health and Physical Education

Health and Physical Education is concerned with the total health of the learner and the community. Besides physical health, it includes mental and emotional health of the learners. Health is often a state of physical, mental, emotional, social and spiritual well-being and not merely the absence of disease or infirmity

The aim of Mainstreaming Health and Physical Education is to enable the student to attain an optimum state of health, by incorporating each of the aforementioned aspects.

A comprehensive view of Health and Physical Education includes and encompasses the three areas of Health Education, Physical Education and Yoga as integral to achieving holistic health (physical, mental, intellectual, emotional, social and spiritual). Given the interdisciplinary nature of this subject, it needs to be transacted in innovative ways across the curriculum

DISTRIBUTION OF MARKS FOR INTERNAL ASSESSMENT

Strand	Marks	Periods (Approx)	Levels*
1. GAMES **A)** Athletics/ Swimming **B)** Team Games **C)** Individual Games/ Activity **D)** Adventure Sports **E)** Indigenous Games	50 marks	90 periods	**Up to 25 marks:** Learning **26-40 marks**: Proficiency **41-50 marks**: Advanced
2. Health and Fitness	25 Marks	50 periods	**Up to 12 marks:** Learning **13-20 marks**: Proficiency **21-25 marks**: Advanced
3. SEWA	25 Marks	50 periods	**Up to 12 marks:** Learning **13-20 marks**: Proficiency **21-25 marks**: Advanced
4. Health and Activity Card	No Marks	10 periods	-
Total	**100 Marks**	**200 Periods**	-

*The grades/levels obtained under the first three Stands will be reflected in the report card

Annexure 2 - SEWA Mentor Observation Form

SCHOOL NAME MENTOR OBSERVATION

Attendance:……
……

Involvement:……
……

Regularity:……
……

Commitment:……
……

Additional
Comments:……
……..

……

……

……

……

……

……

……

……

The activity/ project was [Circle appropriate response]

Satisfactorily Completed Not Satisfactorily completed

Activity/Project Mentor's Signature

Name

Seal of school

Annexure 3 -My SEWA Promise Form

SCHOOL NAME
MY SEWA PROMISE FORM

Dear Student,

SEWA is a firm step to prepare you for life. It is a voluntary project experience. You have to complete my SEWA Promise Form and obtain prior approval for the activity /project. Selection of a SEWA activity, development, implementation of the proposal and evaluation of the activity is the responsibility of each student. Signature of the parent indicates review and approval of this proposal.

Student's Name.....Class :……..

BRIEF DESCRIPTION OF THE ACTIVITY

Duration [Days and Time].....Estimated Hours :……
Name of Mentor Teacher :……..……
……

Student Signature :……
Date…….……..
Parent Signature :……Date……..……..

Annexure 4 -SEWA Hour Log

SCHOOL NAME
SEWA HOUR LOG

STUDENT NAME:_____

PROJECT :_____

Date	Activity	Hours	Mentor's Signature

Annexure 4 -SEWA Hourly Schedule

SCHOOL NAME

SEWA HOURLY SCHEDULE

Hour Count	Date and Day	Proposed activity plan
Hour 1		
Hour 2		

Hour 3		
Hour 4		
Hour 5		
Hour 6		

Annexure 5 -SEWA Self-Appraisal Form

SEWA SELF APPRAISAL FORM

The following questions should be addressed at the end of each activity/project. These are guiding questions. Candidates can either answer on this form or write a reflective, continuous text incorporating responses to these questions.

My Name_____

My Activity / Project_____

My Commitment Towards the Project/ Activity

_____

_____

This Activity/ Project has been a great learning experience because

_____

I initially felt that the project could not have achieved its outcomes because

The project has definitely changed me as a person in terms of behavior, attitude and life skills because

The details of the beneficiary(ies). Any significant comment received from them; please quote

The challenges I faced and the things I might do differently next time so as to improve?

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

1. Background

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

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

2. Objectives:

Objectives of the course are to enable learners to:

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

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

3. Language Items

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

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

4. Methods and Techniques

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

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

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

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

Section A
Reading Skills

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

1. Discursive passage of 400-450 words. **10 marks**

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

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

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

Section B
Writing Skills and Grammar

II. Grammar **10 Marks**

- Determiners
- Tenses
- Modals
- Subject – verb concord
- Reported speech
    - Commands and requests
    - Statements
    - Questions

3. The courses at the secondary level seek to cement high professional grasp of grammatical items and levels of accuracy. Accurate use of spelling, punctuation and grammar will be assessed through Gap Filling/ Editing/Transformation exercises. Ten out of twelve questions will be attempted.

III. Writing Skills **10 marks**

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

5. Writing a Story (on a given cue/title)/Diary Entry, in 100-120 words. One out of two questions is to be answered**.** **5 marks**

Section C

Language through Literature 40 Marks

IV. Reference to the Context 5+5 = 10 Marks

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

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

V. Short & Long Answer Questions

a. Four out of Five Short Answer Type Questions to be answered in 40-50 words from the book BEEHIVE to assess interpretation, analysis, inference and evaluation. **4x3=12 marks**

b. Two out of Three Short Answer Type Questions to be answered in 40-50 words from the book MOMENTS to assess interpretation, analysis, inference and evaluation. **3x2=6 marks**

c. One out of two Long Answer Type Questions from BEEHIVE to be answered in about 100-120 words to assess creativity, imagination and extrapolation beyond the text and across the text. This can also be a passage-based question taken from a situation/plot from the text. **6 marks**

d. One out of two Long Answer Type Questions from MOMENTS, on theme or plot involving interpretation, extrapolation beyond the text and inference or character sketch to be answered in about 100-120 words. **6 marks**

Prescribed Books: Published by NCERT, New Delhi

1.BEEHIVE

Prose

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

Poems

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

2. **MOMENTS**

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

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

NOTE: Teachers are suggested to:

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

(ii) reduce teacher-talk time and keep it to the minimum,

(iii) take up questions for discussion to encourage pupils to participate and to express their ideas and defend their views.

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

INTERNAL ASSESSMENT

Listening and Speaking

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

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

Art-integrated projects based on activities like Role Play, Skit, Dramatization etc. must be used. Please refer to the Circular no. Acad-33/2020 dated 14th May 2020 at the http://cbseacademic.nic.in/web_material/Circulars/2020/33_Circular_2020.pdf for details.

Guidelines for the Assessment of Listening and Speaking Skills are given at Annexure I.

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

Marks-80

Sections	Competencies	Total marks
Reading Comprehension	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	20
Writing Skills and Grammar	Creative expression of an opinion, reasoning, justifying, illustrating, appropriate style and tone, using appropriate format and fluency. Applying conventions, using integrated structures with accuracy and fluency	20
Language through Literature	Recalling, reasoning, appreciating, applying literary conventions, illustrating and justifying. Extract relevant information, identifying the central theme and sub-theme, understanding the writers' message and writing fluently.	40
Total		**80**

For the details of Internal Assessment of 20 marks, please refer to thecircular no. Acad-11/2019, dated March 06, 2019.

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

SECTION - WISE WEIGHTAGE

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

Section A
Reading Skills

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

1. Discursive passage of 400-450 words. **10 marks**

2. Case-based factual passage (with visual input- statistical data, chart etc.) of 200-250 words. **10 marks**

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

Multiple Choice Questions / Objective Type Questions, and Short Answer Questions (to be answered in 30-40 words) will be asked to assess comprehension, interpretation, analysis, inference, evaluation and vocabulary.

Section B
Writing Skills and Grammar

II Grammar **10 Marks**

- Determiners
- Tenses
- Modals
- Subject – verb concord
- Reported speech
  - Commands and requests
  - Statements
  - Questions

3. The courses at the secondary level seek to cement high professional grasp of grammatical items and levels of accuracy. Accurate use of spelling, punctuation and grammar in context willbe assessed through Gap Filling/ Editing/Transformation exercises. Ten out of 12 questions will have to be attempted.

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

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

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

Section C **40 Marks**

Language through Literature

IV. Reference to the Context **5+5=10 Marks**

6. One extract out of two from Drama / Prose.

7. One extract out of two from poetry.

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

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

8. Four out of Five Short Answer Type Questions to be answered in 40-50 words from the bookFIRST FLIGHT to assess interpretation, analysis, inference and evaluation. **4x3=12 marks**

9. Two out of Three Short Answer Type Questions to be answered in 40-50 words each from FOOTPRINTS WITHOUT FEET to assess interpretation, analysis, inference and evaluation. **2x3=6 marks**

10. One out of two Long Answer Type Questions from FIRST FLIGHT to be answered in about100-120 words each to assess creativity, imagination and extrapolation beyond the text andacross the text. This can be a passage-based question taken from a situation/plot from the text. **6 marks**

11. One out of two Long Answer Type Questions from FOOTPRINTS WITHOUT FEET, on theme or plot involving interpretation, extrapolation beyond the text and inference or character sketch to be answered in about 100-120 words. **6 marks**

Prescribed Books: Published by NCERT, New Delhi

1. FIRST FLIGHT

A. Prose

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

B. Poems

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

2. FOOTPRINTS WITHOUT FEET

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

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

Note: Teachers are suggested to:

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

(ii) reduce teacher-talking time and keep it to the minimum,

(iii) take up questions for discussion to encourage pupils to participate and to marshal their ideas and express and defend their views, and

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

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

INTERNAL ASSESSMENT

Listening and Speaking Competencies

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

It is recommended that listening and speaking skills should be regularly practiced.
Art-integrated projects based on activities like Role Play, Skit, Dramatization etc. must be used. Please refer to the Circular no. Acad-33/2020 dated 14th May 2020 at the http://cbseacademic.nic.in/web_material/Circulars/2020/33_Circular_2020.pdf for details

Guidelines for the Assessment of Listening and Speaking Skills are given at Annexure I.

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

Marks 80

Sections	Competencies	Total marks
Reading Comprehension	Conceptual understanding, decoding, analyzing, inferring, interpreting and vocabulary	20
Writing Skills and Grammar	Creative expression of an opinion, reasoning, justifying, illustrating, appropriate style and tone, using appropriate format and fluency. Applying conventions, using integrated structures with accuracy and fluency	20
Language through Literature	Recalling, reasoning, appreciating, applying literary conventions illustrating and justifyingetc. Extract relevant information, identifying the central theme and sub-theme, understanding the writers' message and writing fluently.	40
Total		**80**

For the details of Internal Assessment of 20 marks, please refer to thecircular no. Acad-11/2019, dated March 06, 2019.

Annexure I

Guidelines for Assessment of Listening and Speaking Skills (ALS)

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

Assessment of Listening and Speaking Skills: (5 Marks)

i. **Activities:**

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

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

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

SUGGESTIVE RUBRIC

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

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

iii. **Schedule:**

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