ANNEXURE I

ENGLISH LANGUAGE AND LITERATURE - CLASS X (184)

MUST DO

➢ Reading Section

- Evaluate reading and comprehension skills, including analysis, inference, and evaluation of information.
- Practice passages from **Practice Papers**.
- Write the answers in a concise manner.
- Avoid **verbatim reproduction** from the passage without coherent structure or thought.
- Understand and focus on the **language of the question**: terms like *same as, synonymous to, antonym of, opposite of, except*, etc.
- Use **skimming and scanning techniques** for unseen passages.
- This section is scoring if students grasp question language properly.
- Practice **Assertion and Reasoning Questions**, aligned with the latest CBSE pattern.
- Practice MCQs, aligned with the latest CBSE (2025-26) pattern, for thorough practice.

➢ Grammar:

- Revise **competency-based questions** on Tenses, Articles, Determiners, Modals, Correct Form of the Verb, and Reported Speech repeatedly.
- Emphasize both **identification** and **rectification** in Editing questions; incomplete without either aspect.
- Give ample time for practicing for **Editing questions**.
- Practice **competency-based questions** in the classroom for better understanding.

➢ Writing Section:

- Use prescribed **formats** for all writing tasks in the syllabus.
- Be aware of the **current affairs** and **socially relevant topics** comprehensively.
- Take inspiration for writing tasks from **textbook lessons**.
- Practice **Letter Writing** and **Analytical Paragraphs** on suggested topics aligned with the latest CBSE (2025-26) pattern, for thorough practice.

➢ LITERATURE : (FIRST FLIGHT & FOOTPRINTS WITHOUT FEET)

- **Short Answer Type Questions** : A thorough reading and understanding of the Lessons to be able to attempt questions related to theme and character sketches. A thorough understanding of the poems and a clear idea of the central theme.
- **For Reference to Context Questions** - Practice MCQs, aligned with the latest CBSE (2025-26) pattern, for thorough practice.
- **Long Answer Type Questions** : Practice theme related questions. Interconnected questions from different chapters with similar themes can be asked along with character based questions.
- Present well-developed and justified arguments or evidence. Organise your answer carefully with a clear beginning, middle, and end. Ensure that ideas are highly relevant, logically arranged, and presented in a coherent and cohesive manner.

➢ Key Points:

- Convey the idea/s convincingly using appropriate language
- Organize the content and structure the idea logically, sequentially and cohesively
- Use a range of vocabulary and sentence structure appropriate to the content and context
- Use of functional language to show comparison, contrast, emphasis, conclusion etc.

हिंदी 'अ' (विषय कोड-002) कक्षा-10 सत्र- 2025-26

खंड-क (अपठित बोध) • **अपठित गद्यांश** • **अपठित पद्यांश**	• विद्यार्थी लगभग 250 शब्दों के अपठित गद्यांश पर आधारित बोध, चिंतन एवं विश्लेषण से संबंधित बहुविकल्पीय, अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्नों का अभ्यास अवश्य करें। • विद्यार्थी लगभग 120 शब्दों के अपठित काव्यांश पर आधारित बोध, सराहना, सौंदर्य, चिंतन एवं विश्लेषण से संबंधित बहुविकल्पीय, अतिलघूत्तरात्मक एवं लघूत्तरात्मक प्रश्नों का अभ्यास अवश्य करें।
खंड-ख (व्यावहारिक व्याकरण) • **रचना के आधार पर वाक्य भेद** • **वाच्य** • **पद परिचय** • **अलंकार** **(उपमा/रूपक/उत्प्रेक्षा/अतिशयोक्ति/मानवीकरण)**	• निर्धारित व्याकरणिक विषयों की विषयवस्तु बोध, भाषिक बिंदु/संरचना आदि पर आधारित प्रश्नों का अभ्यास अवश्य करें। • भेद पहचान, विशेषता पहचान,रूपांतरण व उदाहरण लेखन इत्यादि प्रश्नों का अभ्यास अवश्य करें।
खंड-ग (पाठ्यपुस्तक-क्षितिज भाग 2 एवं पूरकपाठ्यपुस्तक-कृतिका भाग 2)	• **बहुविकल्पीय उत्तर-** 1. निर्धारित पाठों के आधार पर पठित गद्यांश आधारित बहुविकल्पीय प्रश्नों का अभ्यास अवश्य करें। 2. निर्धारित कविताओं के आधार पर पठित पद्यांश आधारित बहुविकल्पीय प्रश्नों का अभ्यास अवश्य करें। • **लघु उत्तर-** 1. सभी पाठों को ध्यानपूर्वक पढ़कर समझें। 2. पाठ को समझकर उसके मुख्य विचार और पात्रों की विशेषताएँ जानें। 3. कविताओं के केंद्रीय भाव व विन्यास को समझें। 4. दो अंकीय प्रश्न में न्यूनतम दो तर्क/बिंदु/विवरण अवश्य लिखें। • **दीर्घ उत्तर-** 1. प्रश्न पाठ/कविता की विषयवस्तु, पात्र और उनका व्यवहार, विशेषताओं, सौंदर्य तथा प्रभाव बोध पर आधारित हो सकते हैं। 2. प्रश्न दक्षता परखने वाले, अर्थात् दृष्टिकोण, विश्लेषण, समीक्षा, तुलना आदि पर आधारित होंगे। अतः ऐसे प्रश्नों के उत्तर में विचार, विश्लेषण, तर्क तथा उचित उदाहरण अवश्य शामिल करें। 3. उत्तर सुसंगठित और तार्किक रूप से प्रस्तुत करें: प्रारंभ, मध्य और समाप्ति का ध्यान रखें। 4. चार अंकीय प्रश्न में न्यूनतम चार तर्क/बिंदु/विवरण अवश्य लिखें।
खंड-घ (रचनात्मक लेखन) • **अनुच्छेद लेखन** • **पत्र लेखन** **(औपचारिक/अनौपचारिक)** • **स्ववृत्त/ ई-मेल लेखन** • **विज्ञापन/ संदेश लेखन**	• पाठ्यक्रम में निर्धारित सभी लेखन कार्यों के लिए निर्धारित प्रारूपों का प्रयोग करें। • समसामयिक घटनाओं तथा सामाजिक रूप से प्रासंगिक विषयों पर विस्तृत चर्चा एवं लेखन अभ्यास करें। • प्रस्तावना-मुख्य भाग-निष्कर्ष का स्पष्ट क्रम रखें। • उचित शब्दावली व शब्द सीमा का विशेष ध्यान रखें।

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'MUST DO' TOPICS

MATHEMATICS

CLASS: X

CHAPTER NAME	MUST DO TOPICS
REAL NUMBERS	1. HCF & LCM 2. Proof of irrationality of $\sqrt{2}$, $\sqrt{3}$, $\sqrt{5}$ etc.
POLYNOMIALS	1. Zeroes of polynomial 2. Relation between zeroes and coefficients
PAIR OF LINEAR EQUATIONS IN TWO VARIABLES	1. Consistency/Inconsistency conditions 2. To find solution of equations using graph 3. Elimination method & Substitution method
QUADRATIC EQUATIONS	1. Standard form of quadratic equation 2. Roots of quadratic equation 3. Relationship between discriminant and nature of roots
ARITHMETIC PROGRESSION	1. Finding n^{th} term of an AP 2. Finding sum of first n terms of an AP
COORDINATE GEOMETRY	1. Distance Formula 2. Section Formula 3. Mid-point formula
TRIGONOMETRY	1. Values of trigonometric ratios at 0^0, 30^0, 45^0, 60^0 and 90^0. 2. Problems based on identities 3. Figures based on angles of elevation and angle of depression
CIRCLES	1. Tangents from an external point to a circle are equal 2. Tangent is perpendicular to the radius at the point of contact
SURFACE AREAS AND VOLUME	1. All formulas related to the chapter 2. Surface area and volume of combination of solids
STATISTICS	1. Finding mean by direct method and assumed mean 2. Finding mode & median 3. Relationship between mean, median & mode
PROBABILITY	Questions based on coin, cards and dice

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Must Do Topics
Class X, Session:2025-26
Subject :Science

Section A: BIOLOGY

5. **Life Processes**
   - Nutrition, respiration, transportation, excretion in plants and animals
6. **Control and Coordination**
   - Nervous system and endocrine system in humans
   - Tropic movements in plants and plant hormones
7. **How Do Organisms Reproduce?**
   - Modes of reproduction: asexual and sexual
   - Human reproductive system and menstrual cycle
   - Reproductive health
8. **Heredity**
   - Mendel's laws of inheritance
   - Sex determination in humans
13. **Our Environment**
   - Ecosystem: components and functioning
   - Waste management: biodegradable and non-biodegradable

Section B: CHEMISTRY

1. **Chemical Reactions and Equations**
   - Types of chemical reactions (combination, decomposition, displacement, double displacement, redox)
   - Balancing chemical equations
   - Applications of reactions in daily life
2. **Acids, Bases, and Salts**
   - Properties and reactions of acids and bases
   - pH scale and its importance
   - Common salts: preparation, properties, and uses
3. **Metals and Non-Metals**
   - Properties of metals and non-metals
   - Reactions of metals with acids, water, and oxygen
   - Corrosion and its prevention
4. **Carbon and its Compounds**
   - Covalent bonding in carbon compounds
   - Homologous series, functional groups
   - Important reactions: combustion, substitution, addition, and esterification

Section C: Physics

9. **Light – Reflection and Refraction**
   - Laws of reflection and refraction
   - Image formation by mirrors and lenses
   - Applications of spherical mirrors and lenses
10. **Human Eye and the Colourful World**
   - Structure and function of the human eye
   - Defects of vision and their correction
   - Atmospheric refraction and dispersion (rainbow formation)
11. **Electricity**
   - Ohm's law, series and parallel circuits
   - Power and energy in electrical appliances
12. **Magnetic Effects of Electric Current**
   - Magnetic field and field lines
   - Electromagnetic induction
   - Domestic electric circuits

SOCIAL SCIENCE

Class X

Must to Do Topics

India and the Contemporary World II

CH.1 The Rise of Nationalism in Europe

- Reasons for the Rise of Nationalism in Europe
- French Revolution and Nationalism and Napoleonic code of 1804
- Vienna Conference
- Unification of Italy
- Unification of Germany
- Nationalism in Britain
- Nationalism in Greece
- Balkan Crisis
- Picture based question on symbols and their meaning

CH.2 Nationalism in India

- Idea of Satyagraha of Mahatma Gandhi
- Impact of First World War on India
- Comparative study of Non – Comparative & Civil Disobedience movement (special emphasis on Aim, Methods, Participation, outcome/ limit)
- Perception of Swaraj by Different sections of Society
- Role of Ambedkar (Poona Pact & Depressed Class Association)
- How sense of collective belongingness emerged in India
- Short note on Rowlatt Act, Jallianwala Bagh, Khilafat Movement, Simon Commission, Round table conference)
- Map Work

CH. 3 The Making of Global World

- Silk Routes Link the World
- Food Travels: Spaghetti and Potato
- Conquest, Disease and Traders

CH.5 Print Culture and the Modern World

- The First Printed Books
- Print Comes to Europe
- The Print Revolution and its impact
- The Reading Mania
- The Nineteenth Century

- India and the World of Print
- Religious Reform and Public Debates
- New forms of Publication
- Print and Censorship

Contemporary India II

CH.1 Resources and Development

- Types of Resources
- Development and Conservation of Resources (Sustainable Development)
- Land Resources, Utilization, Degradation and conservation
- Types of Soils, Soil Erosion and Soil Conservation
- Map Work

CH.2 Forest and Wildlife Resources

- Conservation of Forest and Wildlife in India
- Types and Distribution of Forest and Wildlife Resources
- Community and Conservation

CH.3 Water Resources

- Water Scarcity and the Need for Water Conservation and Management
- Multi-Purpose River Projects and Integrated Water Resources Management
- Rainwater Harvesting
- Map Work

CH.4 Agriculture

- Types of Farming
- Cropping Pattern
- Major Crops
- Technological and Institutional Reforms
- Map Work

CH.5 Minerals and Energy Resources

- What is Mineral?
- Mode of Occurrence of Minerals
- Classification of Minerals
- Conservation of Minerals
- Energy Resources
- Conventional Sources and Non- Conventional Sources of Energy
- Conservation of Energy Resources
- Map Work

CH.6 Manufacturing Industries

- Importance of Manufacturing Industries
- Factors affecting location of Industries
- Classification of Industries
- Industrial Pollution and Environmental Degradation
- Control of Environmental Degradation
- Map Work

CH.7 Life Lines of National Economy

- Map Work

Democratic Politics II

CH.1 Power Sharing

- Comparative study of power sharing in Belgium and Sri Lanka (Problems and Accommodation)
- Forms of Power Sharing
- Need and Importance of power sharing

CH.2 Federalism

- Key features of Federalism
- Difference between coming together federation and Holding together federation
- Distribution of Powers
- Language policy and Linguistic States
- Decentralization in India (Panchayati Raj)

CH.3 Gender, Religion and Caste

- Gender and Politics
- Religion, communalism and politics
- Caste and politics

CH.4 Political Parties

- Meaning, Function and need of Political Parties
- Types of Political Parties (National and State)
- Policies and Symbols of National and Regional Political Parties in India
- Challenges to Political Parties
- How can Political Parties be reformed?

CH.7 Outcome of Democracy

- Evaluation of Democratic form of Government
- Political and Economic outcome of Democracy

Understanding Economic Development

CH.1 Development

- Meaning of Development (Different people Different Goals)
- Key Feature of National Development
- Short Notes - Per Capita Income, Infant Mortality Rate, Literacy Rate, Net Attendance Ratio.
- Human Development Index
- Sustainability of Development

CH.2 Sectors of Indian Economy

- Sectors of Economy
- GDP & Problem of Double Counting
- Types of Unemployment
- MGNREGA 2005
- Differentiate between Public and Private Sector
- Differentiate between Organized and Unorganized Sector

CH.3 Money and Credit

- Barter System & Double coincidence of Demand
- Forms of Currency (Modern and Old)
- Function of RBI
- Formal and Informal source of Credit
- Credit as an Assets and Debt Trap
- Condition for Credit
- Self Help Group (SHG's)

CH.4 Globalization and Indian Economy

- Factors affecting Globalisation
- Foreign Trade and Foreign Investment

"A student's behaviour during the exam is likely to influence his or her exam result."

Must-Do Topics in Class XII Mathematics for CBSE Exam for the year (2025-26)

CBSE Class 12 Mathematics syllabus for (2025-26) maintains six units totalling 80 marks in theory.
High-weightage areas remain Calculus (35 marks), Vectors & 3D Geometry (14 marks), and Algebra (10 marks), emphasizing application-based questions from NCERT and recent board patterns

Focus on these **high-yield** subtopics aligned with the official syllabus, prioritizing derivations, numericals, and NCERT Exemplar practice.

Relations and Functions (8 marks)

- Types of relations: reflexive, symmetric, transitive, equivalence.
- One-one (injective) and onto (surjective) functions with verification
- Inverse trigonometric functions: definition, domain/range, principal value, graphs.

Algebra: Matrices (part of 10 marks)

- Operations: addition, multiplication, scalar; transpose, symmetric/skew-symmetric.

Algebra: Determinants (part of 10 marks)

- 3x3 determinants: minors, cofactors; area of triangle.
- Adjoint, inverse; solving 2-3 linear equations using inverse (unique solutions)

Calculus: Continuity & Differentiability (~9 marks)

- Continuity at point/interval; chain rule, implicit/exponential/logarithmic derivatives.
- Parametric forms, second-order derivatives; inverse trig derivatives.

Applications of Derivatives (~4-8 marks)

- Rate of change; increasing/decreasing
- Maxima/minima: first/second derivative tests

Integrals & Applications (~6 marks)

- Integration: substitution, partial fractions, by parts; standard forms.
- Definite integrals; areas under curves (lines, circles/parabolas/ellipses).

Differential Equations (~7 marks)

- Order/degree; separation of variables, homogeneous first-order.
- Linear Differential Equations:

$$\frac{dy}{dx} + Py = Q$$

$$\frac{dx}{dy} + Px = Q$$

Vector Algebra (part of 14 marks)

- Scalars/vectors; dot/cross products, projections; properties/applications.

3D Geometry (part of 14 marks)

- Direction cosines/ratios; line/plane equations; skew lines, shortest distance between two skew-lines & shortest distance between two parallel lines, Foot of the perpendicular drawn from a point on the given line and image of the point in the given line

Linear Programming (5 marks)

- Graphical method; feasible regions (bounded/unbounded), optimization (2 variables).

Probability (8 marks)

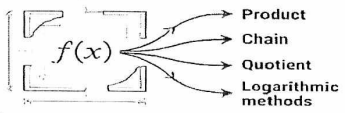
- Conditional probability; multiplication theorem, independent events, Bayes' theorem

Your Blueprint for Mastering Class 12 Maths

This infographic breaks down the most critical, high-priority topics for the Class 12 Maths exam. Think of this as a blueprint for a house: focusing on these topics ensures your "load-bearing walls"—the most important concepts—are strong enough to support your entire score.

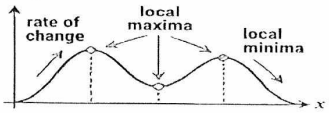
The Core of Calculus

Master Differentiation Rules



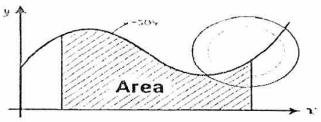
Focus on Product, Chain, Quotient, and Logarithmic differentiation methods.

Apply Derivatives



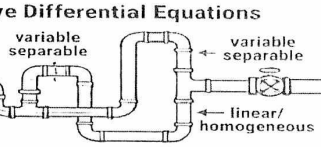
Solve problems on rate of change, and find local maxima & minima.

Visualize Integrals



Calculate the area under curves and between simple figures like circles.

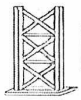
Solve Differential Equations



Practice variable separable methods for lineer and homogeneous equations.

Essential Algebra & Functions

Understand Matrices & Determinants



$$\begin{bmatrix} A & B \\ A & B \end{bmatrix} = \begin{bmatrix} \times & \cdot \\ \cdot & \times \cdot \end{bmatrix}$$

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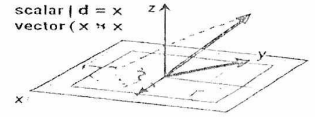
A^{-1}

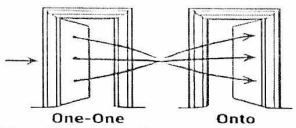
Focus on matrix multiplication and solving linear equations using matrix inverse.

Command Vector & 3-D Geometry



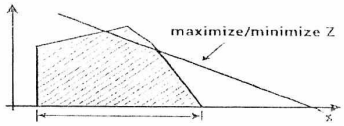
Calculate scalar/vector products and find the shortest distance between lines.

Analyze Relations & Functions



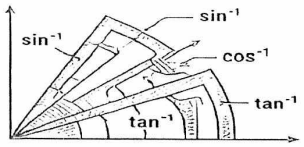
identify and understand **One-One** and **Onto** fonctions and their properties.

Solve Linear Programming Problems



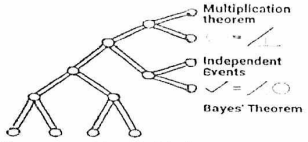
Master the graphical solution method for linear programming problems.

Know Inverse Trigonometry



The primary focus is mastering the properties of inverse trigonometric functions.

Tackle Key Probability Theorems



Focus on the Multiplication theorem, independent Events, and Bayes' Theorem.

MUST DO TOPICS (2025-2026)
CLASS 12, SUBJECT ECONOMICS (030)

Part A: Introductory Macroeconomics (40 Marks)

This section is technical and contains the majority of the numerical problems.

Unit	Marks	Key Topics
National Income & Related Aggregates	**10**	Methods of calculating National Income (Value Added, Income, Expenditure); Real vs. Nominal GDP; Circular Flow of Income.
Money and Banking	**06**	Money Creation by Commercial Banks; Functions of Central Bank (RBI); Quantitative tools (Repo Rate, CRR, SLR).
Determination of Income & Employment	**12**	**Highest Weightage.** Aggregate Demand/Supply; Investment Multiplier; Short-run Equilibrium; Inflationary/Deflationary gaps.
Government Budget & the Economy	**06**	Classification of Receipts/Expenditure; Objectives of the Budget; Revenue/Fiscal/Primary Deficits.
Balance of Payments (BoP)	**06**	Components of BoP (Current/Capital Account); Foreign Exchange Rate determination (Fixed vs. Flexible).

Part B: Indian Economic Development (40 Marks)

This section is more descriptive and requires a strong grasp of dates, policies, and comparisons.

Unit	Marks	Key Topics
Development Experience (1947-90) & Economic Reforms (1991)	12	State of the economy on the eve of Independence. Common goals of Five Year Plans. **LPG Policy:** Features and appraisals of Liberalization, Privatization, and Globalization.
Current Challenges Facing Indian Economy	20	Human Capital Formation, Rural Development (credit and marketing), Employment (formal/informal sectors), and Sustainable Economic Development.
Development Experience Comparison	08	Comparative study of India, Pakistan, and China (Growth, Population, Sectoral Development).

Must do topics for class-XII Political Science (028) Yr.2025-26

Book-1 Contemporary World Politics

S.No.	Chapter	Topics
1.	End of Bipolarity	Soviet System. Causes and effects of the disintegration of Soviet Union. Shock Therapy. Effects of Shock Therapy.
2.	Contemporary Centres of Power	European Union. ASEAN. Inda-China relations. Japan and South Korea.
3.	Contemporary South Asia	India Bangladesh relations. India Sri Lanka relations. Role of India in South Asia. Indio-Pak relations.
4.	International Organisations	Need of an international organisation. Structure of United Nations. Security Council. Reforms required in UN. India and the permanent membership of the Security Council. Relevance of the UN in the contemporary world.
5.	Security in the Contemporary World	External and Internal Security: Traditional Notion. Non-Traditional Notion. New sources of threats. India's Security strategy.
6.	Environment and Natural Resources	Environmental Concerns in global Politics. Global Commons. Common but different responsibilities. India's stand. Indigenous people and their rights.
7.	Globalisation	Causes and effects. Economic. Political. Cultural. Positive and Negative effects. Resistance how and why.

Book-II Politics in India since independence

S.No.	Chapter	Topic
1.	Challenges of Nation Building	Three challenges of Nation Building. Process and Consequences of Partition. Integration of Princely States. Jammu and Kashmir. Hyderabad.Manipur.
2.	Era of One-Party Dominance	Congress dominance in first three general elections. CPI. BJS. Emergence of opposition Parties.
3.	Polities of Planned Development	Planning commission. Five Year Plans.
4.	India's External Relations	Policy of Non-Alignment. Peace and Conflict with China and Pakistan. India's Nuclear Policy. Shifting alliances in world politics.
5.	Challenges to restoration of the congress system	Challenges of Political Succession. Fourth general elections 1967. Split in the Congress Party. Presidential Election of 1969. Election of 1971 and Restoration of Congress.
6.	The Crisis of Democratic order	Gujarat and Bihar Movements. Causes and Consequences of Emergency. Lessons of the Emergency. Lok Sabha elections of1977.
7.	Regional Aspirations	North-East. Punjab. Jammu and Kashmir
8.	Recent Developments in Indian Polities	Era of Coalition. Political rise of other backward classes. Mandal commission. Emergence of new consequences. Communalism Secularism and Democracy.

Chapter wise "MUST-DO" topics for Class 12 Biology(CBSE Board Exam 2025–26)

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✎ **Chapter 1: Sexual Reproduction in Flowering Plants**
Structure of flower (androecium, gynoecium)
Microsporogenesis & megasporogenesis
Development of male & female gametophyte
Pollination (types & agents)
Double fertilization (diagram compulsory)
Seed & fruit development
Apomixis and polyembryony
☞ Diagrams compulsory:
L.S. of anther
Embryo sac
Double fertilization

✎ **Chapter 2: Human Reproduction**
Male & female reproductive systems (diagram)
Gametogenesis (spermatogenesis & oogenesis)
Menstrual cycle (phases + hormones)
Fertilization, implantation, placenta
Parturition & lactation

✎ **Chapter 3: Reproductive Health**
Contraceptive methods (natural, barrier, IUDs, hormonal)
Medical Termination of Pregnancy (MTP)
Sexually transmitted diseases (STD)
Assisted Reproductive Technologies (IVF, ZIFT, GIFT)

✎ **Chapter 4: Principles of Inheritance and Variation**
MOST IMPORTANT CHAPTER
Mendel crosses (mono & dihybrid)
Laws of inheritance
Incomplete dominance & codominance
Multiple alleles (ABO blood group)
Pleiotropy
Linkage & recombination
Chromosomal theory of inheritance
Pedigree analysis
Polygenic inheritance
☞ Practice numericals + case-based questions

✎ **Chapter 5: Molecular Basis of Inheritance**
DNA structure (Watson & Crick model)
DNA replication
Transcription & translation
Genetic code
Lac operon
Mutation & DNA repair
Human Genome Project
DNA fingerprinting
☞ Flowcharts & diagrams are compulsory

✎ **Chapter 6: Evolution**
Origin of life theories
Evidences of evolution
Darwinism & modern synthetic theory
Hardy–Weinberg principle (numericals)
Adaptive radiation
Human evolution (sequence)

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Chapter 7: Human Health and Disease

Pathogens & diseases (malaria, typhoid, pneumonia)
Immunity (innate & acquired)
Antibodies & vaccination
AIDS
Cancer
Drug & alcohol abuse

Chapter 8 : Microbes in Human Welfare

Microbes in:
Household products
Industrial products
Sewage treatment
Biogas production
Antibiotics
Biocontrol agents
Biofertilizers

Chapter 9: Biotechnology – Principles and Processes

Genetic engineering steps
Restriction enzymes
Vectors (pBR322)
PCR
Gel electrophoresis
Bioreactors

Labelled diagrams compulsory

Chapter 10: Biotechnology and its Applications

Bt cotton
RNA interference
Insulin production
Gene therapy
Transgenic plants & animals
Ethical issues

Chapter 11 Organisms and Populations

Population attributes
Population growth models
Population interactions

Chapter 12 Ecosystem

Energy flow
Food chain & food web
Ecological pyramids
Productivity

Chapter 13 Biodiversity and Conservation

Levels of biodiversity
Biodiversity hotspots
Endangered species
Conservation strategies (in situ & ex situ)
Sacred groves

- **FINAL BOARD EXAM TIPS**

NCERT lines, tables & diagrams are supreme
Practice case-based & assertion-reason questions
Revise Genetics + Molecular biology repeatedly
Draw neat, labelled diagrams for 5-mark and 3-mark answers.
Practice PYQs as many times as possible.
Through writing practice for each and every topics covered.
Make mind-maps for each Chapter for revision.

Class XII History
(2025-26)
Must Do Topics

Chapter 1. Bricks, Beads and Bones: The Harappan Civilisation

i. Agricultural technologies
ii. Urban planning and Drainage system
iii. Tracking Social Differences through burials and luxuries items
iv. Craft production and strategies for procuring raw materials
v. Contact with distant lands
vi. Seals, Script, palaces and kings
vii. End of the Civilisation
viii. Cunningham's confusion

Chapter 2. Kings, Farmers and Towns

i. The Earliest States and First amongst the sixteen: Magadha
ii. Sources and the administration of the Mauryan Empire
iii. Popular perceptions of kings
iv. Strategies for increasing production
v. Land grants
vi. Trade, Coins and kings
vii. Limitations of Inscriptional Evidence

Chapter 3. Kinship, Caste and Class

i. The Critical Edition of the Mahabharata
ii. The ideal of patriliny
iii. Rules of marriage and Gotra
iv. Chaturvarna and Duties of Chandals
v. Non-Kshatriya kings
vi. Access to property
vii. Authors, Language and content of Mahabharata

Chapter 4. Thinkers, Beliefs and Buildings

i. Sanchi and Amravati Stupa: Preservation and structure
ii. Jainism an Buddhism: Teachings
iii. Sculpture and Popular traditions
iv. The development of Mahayana Buddhism
v. The growth of Puranic Hinduism

Chapter 5 Through the Eyes of Travellers

i. Al-Biruni and the Kitab-ul-Hind, Overcoming barriers to understanding, Al-Biruni's description of the caste system
ii. Ibn Battuta: An early globe-trotter, A unique system of communication, Women Slaves, Sati and Labourers
iii. François Bernier: The question of landownership

Chapter 6 Bhakti-Sufi Traditions

i. Early Traditions of Bhakti, Attitudes towards caste, Women devotees
ii. The Virashaiva Tradition
iii. The Growth of Sufism: Khanqahs and silsilas, Sufis and the state
iv. Kabir, Baba Guru Nanak

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Chapter 7 An Imperial Capital Vijayanagara

i. The apogee and decline of the empire
ii. The amara-nayaka system
iii. Water resources, Fortifications and roads
iv. The mahanavami dibba
v. Gopurams and mandapas

Chapter 8 Peasants, Zamindars and the State

i. An abundance of crops
ii. Panchayats and headmen, Jati Panchayat
iii. A little republic
iv. Women in Agrarian Society
v. The Zamindars
vi. Land Revenue System
vii. The Ain-i Akbari of Abu'l

Chapter 9 Colonialism and the Countryside

i. The Permanent Settlement
ii. Why zamindars defaulted on payments
iii. The rise of the jotedars
iv. The Fifth Repor
v. The Pahariyas versus The Santhals
vi. The cotton boom
vii. The Deccan Riots

Chapter 10 Rebels and the Raj

i. Lines of communication
ii. Rumours and prophecies
iii. Firangi raj and Awadh
iv. The vision of unity
v. The search for alternative power
vi. Images of the Revolt

Chapter 11 Mahatma Gandhi and the Nationalist Movement

i. The Non-cooperation Movement
ii. The Salt Satyagraha
iii. The Quit India Movement
iv. Knowing Gandhi

Chapter 12 Framing the Constitution

i. A Tumultuous Time
ii. Opinions expressed by the public
iii. The dominant voices
iv. Objectives Resolution
v. The Powers of the State
vi. The Language of the Nation

MUST DO TOPICS

CLASS-XII

SUBJECT: BUSINESS STUDIES

1. Objectives and Levels of Management, Coordination
2. Fayol's and Taylor's Principles of Management
3. Dimensions of Business Environment
4. Planning Process, Types of Plans
5. Organizational Structure, Functional and Divisional structure of organisation, Delegation and Decentralization
6. Recruitment- and Selection- Process
7. Motivation- financial and non-financial incentives, Leadership, Motivation and Communication.
8. Controlling Process
9. Financial Decisions, Capital structure (Factor affecting)
10. Money Market and Capital Market, Functions of SEBI,
11. Marketing Mix, Factors affecting price determination, Physical Distribution, Public Relation,
12. Rights and Responsibilities of Consumers and Redressal machinery (as per Consumer Protection Act,2-19)

c|A2

Must-Do Topics
CBSE Class XII – English Core
Annual Examination (Session 2025–26)

Section A: Reading Skills

- The question paper will include two unseen passages designed to assess: Comprehension, Interpretation, Analysis, Inference and Evaluation.
- The **first passage** may be factual, descriptive, or literary in nature.
- The **second passage** is likely to be a case-based factual passage and may include visual or verbal inputs such as charts, graphs, or statistical data.
- Vocabulary will be tested through contextual understanding and inference.
- The combined word limit of both passages will be 700 750 words.
- Questions will include:
  Multiple Choice / Objective-type questions
  Short Answer questions (to be answered in 20-30words
- For effective preparation, practice passages from:
  Support materials
  Sample papers
  Practice papers available on DoE and CBSE Websites .

Section B: Writing Skills

Writing Tasks

Students must prepare the following formats thoroughly:

- Notices
- Invitations and Replies (Formal and Informal)
- Letters
- Articles
- Report writing
- Job Application with Resume
- Letter to the Editor

Effective Organisation

- Introduction: Clearly state the purpose of writing.
- Body: Develop ideas logically using relevant details, examples, causes, and effects.
- Conclusion: End with meaningful suggestions, recommendations, or a brief summary.

Language Use

- Use a varied and appropriate vocabulary to show: Comparison, Contrast , Emphasis, Conclusion
- Adhere strictly to the prescribed word limits.

Section C: Literature

Prescribed Textbooks: Flamingo and Vistas

Preparation Guidelines for Literature

- Read all chapters and poems thoroughly.
- Focus on:
  - Key themes and central ideas
  - Character sketches and plot development
  - Symbols and figures of speech
- Pay special attention to literary devices such as:
  - Imagery
  - Symbolism
  - Irony
  - Humour
- Understand the central ideas of poems.

Answer Writing Guidelines

Short Answer Questions (40–50 words)

- Be brief, relevant, and precise.
- Address the question directly without unnecessary details.

Long Answer Questions (120–150 words)

- Introduction: Provide context related to the question.
- Body: Explain in detail with suitable examples from the text.
- Conclusion: Summarize logically or offer an inference.

Extract-Based Questions

- Clearly mention:
  - Name of the poem and poet
  - Name of the prose and author
- Identify and explain relevant poetic or literary devices.
- Avoid copying lines directly from the extract; write answers in your own language.

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MUST DO TOPICS FOR XII PHYSICS (042)

SESSION 2025-26

S.N.	CHAPTER 1 ELECTRIC CHARGES AND FIELD
1.	Coulomb's Law in vector forma
2	Forces and Field due to multiple charges
3	Electric field due to dipole along the axial and equatorial point.
4.	Electric dipole in an external electric field experiences a torque. Stable and unstable equilibrium
5.	Electric flux and Gauss's theorem and its applications to obtain electric field due to long straight charge conductor, thin infinite plane sheet of charge and spherical shell.
	CHAPTER–2: ELECTROSTATIC POTENTIAL AND CAPACITANCE
1.	Electric Potential and Electric potential energy due to electric dipole and system of point charges.
2.	Equipotential surfaces, and its property.
3.	Electric potential due to dipole at any point, axial point and equatorial point of dipole.
4.	Relation between electric field and potential.
5.	Effect of dielectric on capacitors, expression for capacitance of capacitor with dielectric and conducting medium.
6.	Combinations of capacitors, problems based on series and parallel.
7.	Energy stored in a capacitor qualitative and Problems based on Energy stored in capacitors.
	CHAPTER 3 CURRENT ELECTRICITY
1.	Ohm's Law and its Limitations: ohmic and non ohmic material.
2.	Temperature dependence of resistance and resistivity. Resistivity of different materials, viz metals insulators and semiconductor.
3.	Vector form of Ohms law.
4.	Relation between emf, internal resistance and terminal potential. Characteristics curve of a cell i.e graph between emf and resistance, terminal potential between resistance, current and potential.
5.	Combination of cells in series and parallel.
6.	Kirchhoff's law and problems.
	CHAPTER 4 MOVING CHARGES AND MAGNETISM
1.	Biot-savert's law and its application to find Magnetic field along the axis of a circular current carrying loop and at the centre of circular current loop.
2.	Lorentz magnetic force. (Force on charge particle in uniform magnetic field $F = qvB\sin\theta$)

3.	Motion of charge particle in a uniform magnetic field and its behaviour in different notations. Radius of charge particle in circular motion.
4.	Ampere's circuital law and its application to derive an expression for magnetic field due to thin and thick current conductor.
5.	Force on current carrying conductor $F = IBl \sin\theta$. Force between two parallel current-carrying wires. $F = \frac{\mu_0}{2\pi}\frac{I_1 I_2}{r} l$ and define one ampere
6.	Torque on current-carrying loop in a magnetic field. And current carrying loop behave as a dipole
7.	Moving coil galvanometer principle, working, sensitivity and conversion to ammeter and voltmeter.
	CHAPTER–5: MAGNETISM AND MATTER
1.	Magnetic field lines and its properties
2.	Torque on a magnetic dipole (bar magnet) in a uniform magnetic field.
3.	Diamagnetic, Paramagnetic, Ferromagnetic Substance with examples.
	CHAPTER–6: ELECTROMAGNETIC INDUCTION
1.	Magnetic flux and SI unit
2.	Faraday's law of electromagnetic induction applies to various situation
3	Lenz's law is the law of conservation of energy
4.	Derivation of Motional EMF and its application.
5.	Magnetic energy
6.	Derivation of Self-inductance due to long straight solenoid and mutual-inductance of two coaxial solenoid.
	CHAPTER–7: ALTERNATING CURRENT
1.	rms value of current and voltage no derivation.
2.	Expression for current in RC, LR, and LCR Circuits and its phasor diagram.
3.	Power across L, C, R and LCR circuit and Power factor.
4.	Resonance and Sharpness.
5.	Transformers and AC generator. Theory. Principle working.
	CHAPTER 8 ELECTROMAGNETIC INDUCTION
1.	Displacement Current
2.	EM waves and source.
3.	Nature of EM waves/Spectrum and its uses and production.
	CHAPTER–9: RAY OPTICS AND OPTICAL INSTRUMENTS
1.	Image formation by spherical mirrors and spherical lenses

2.	Expression for apparent depth.
3.	Total internal reflection and its application.
4.	Expression for mirror formula and lens formula for real and virtual image.
5.	Lens maker formula (derivation)
6.	Refraction through a Prism. Obtain expression for angle of deviation and prism formula.
7.	Power and combination of lenses.
8.	Ray diagram for Simple microscope, compound microscope and telescope and expression for magnification at least distance and far point
	CHAPTER–10: WAVE OPTICS
1.	Types and behaviour of wavefront.
2.	Law of reflection and refraction on the basis of Huygen's wave theory
3.	Coherent sources and sustained interference of light.
4.	Interference of wave. Amplitude, intensity and fringe width qualitative treatment.
5	Diffraction of light. Fringe width of central maxima.
	CHAPTER–11: DUAL NATURE OF RADIATION AND MATTER
1.	Experimental study of photoelectric effect. Variation intensity of light with current. Potential with current, frequency with stopping potential.
2.	Einstein's photoelectric equation.
3.	Using Einstein's photoelectric equation and variation stopping potential verses frequency, find planck's constant and work function.
4.	de-Broglie relation. For matter wave and electron.
	CHAPTER–12: ATOMS
1.	Alpha-particle scattering experiment: Rutherford's model of atom: distance of closest approach, impact parameter, trajectory of scattered alpha-particle.
2.	Postulates of Bohr model of hydrogen atom.
3	Expression for radius of nth possible orbit, velocity and energy of electron in nth orbit.
4.	Spectral series, Lymen, Balmer, Paschen, Bracket and pfund. Shortest and longest wave length.
	CHAPTER–13: NUCLEI
1.	size of nucleus. $R = R_o A^{1/3}$
2.	Nuclear density is independent of mass number.
3.	Nuclear force and its property.
4.	Mass defect and binding energy.

5.	Variation of binding energy per nucleon Vs atomic number
6.	Nuclear reaction, fission and fusion.
	CHAPTER–14: SEMICONDUCTOR ELECTRONICS: MATERIALS, DEVICES AND SIMPLE CIRCUITS
1.	Difference between intrinsic and extrinsic semi-conductor.
2.	Difference between n type and p-type semi-conductor.
3.	Difference between metals, insulator and semi-conductor on the basis of band theory.
4.	p-n junction, drift and diffusion, Depletion layer, barrier potential.
5.	I-V characteristics in forward and reverse bias.
6.	Half wave and full wave rectifier, diagram, working input and out put wave form.

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MUST DO TOPICS FOR CLASS-XII

SUBJECT: ACCOUNTANCY

1. Fundamentals of partnership (Past adjustments and Guarantee)
2. Admission of a Partner (Capital Adjustment)- Focus on treatment of goodwill
3. Retirement of a Partner (Capital adjustment)- Focus on treatment of goodwill
4. Preparation of Deceased partner's capital account to be rendered to his/her executor.
5. Dissolution (Journal entries),
6. Issue of shares (forfeiture and reissue with pro rata)
7. Issue of Debentures (issue of debentures with term of redemption)
8. Items to be shown in the balance sheet under different heads and sub heads
9. Comparative and common size statements.
10. Ratio Analysis (Short term and long term solvency ratios)
11. Cash flow Statement (Operating, Investing and Financing Activities (More focus on operating activities)

अनिवार्य विषय–वस्तु बिंदु : विषय– हिंदी (ऐच्छिक), कक्षा 12

खंड 'क' – अपठित बोध

- अपठित गद्यांश अभ्यास– विद्यार्थी अपठित गद्यांश (लगभग 250 शब्द) पर आधारित बोध, चिंतन, विश्लेषण पर बहुविकल्पीय, अतिलघूत्तरात्मक, लघूत्तरात्मक प्रश्नों का अभ्यास अवश्य करें।
- अपठित पद्यांश अभ्यास– विद्यार्थी अपठित पद्यांश (लगभग 100 शब्द) पर आधारित बोध, सराहना, सौंदर्य, चिंतन, विश्लेषण आदि पर बहुविकल्पीय, अतिलघूत्तरात्मक, लघूत्तरात्मक प्रश्नों का अभ्यास अवश्य करें।

खंड 'ख' – अभिव्यक्ति और माध्यम

- पाठ 4– पत्रकारीय लेखन के विभिन्न रूप और लेखन प्रक्रिया तथा पाठ 5– विज्ञापन लेखन : स्वरूप और प्रकार
  का अध्ययन अवश्य करें।
- पाठ 6– कैसे बनती है कविता, पाठ 7– नाटक लिखने का व्याकरण तथा पाठ 8– [illegible]
  का विशेष अध्ययन करें।
- नए और अप्रत्याशित विषयों पर लगभग 100 शब्दों में रचनात्मक लेखन का अभ्यास अनिवार्य है।

खंड 'ग' – पाठ्यपुस्तक अंतरा भाग 2 और अंतराल भाग 2

- पाठ्यक्रम में निर्धारित सभी गद्य और पद्य पाठों के प्रमुख व्याख्येय स्थलों की सप्रसंग व्याख्या का अभ्यास अवश्य करें क्योंकि सप्रसंग व्याख्या का भारांक सबसे अधिक (6+6) 12 अंकों का है।
- सप्रसंग व्याख्या में संदर्भ, प्रसंग, व्याख्या और विशेष के बिंदुओं का ध्यान रखें तथा इसे क्रम से ही लिखें। भाव अथवा मूल कथ्य, संवेदना तथा भाषा और शिल्प को समझकर सभी पाठों के नाम और उनके लेखकों के नाम स्मरण कर लें।
- पूरक पाठ्य पुस्तक के अधिकांश प्रश्न अनुप्रयोगात्मक/अभिव्यक्तिपरक होते हैं, इन प्रश्नों में आपके विचारों को प्रमुखता दी जाती है। अतः आप जो भी उत्तर लिखें वह तर्कसंगत और संतुलित हो। अतः आपसे अपेक्षा की जाती है कि प्रत्येक पाठ की मूल संवेदना के मुख्य बिंदुओं को चिह्नित कर उनपर अपने विचार और तर्क प्रस्तुत करने का अभ्यास अवश्य करें।

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Must do topics of physical education class 12

- Fixtures
- Role of different committees
- Common postural deformities
- Special consideration (menarche and menstrual dysfunction)
- Female athlete triad (osteoporosis, amenorrhea, eating disorders)
- Importance of various asanas for preventive measures of obesity, diabetes, asthma, hypertension, back pain.
- Advantages for Children with Special Need through Physical Activities
- Strategies physical activities accessible for children with special needs
- Eating for Weight control – A Healthy Weight, The Pitfalls of Dieting, Food Intolerance and Food Myths
- Macro and Micro Nutrients: Food sources and functions
- BMI, BMR, Harvard step test
- Effect of exercise on Muscular System
- Effect of exercise on Cardio- Respiratory System
- Newton's Law of Motion & its application in sports.
- Types of Levers and their application in Sports.
- Friction and Sports
- Personality; its definition & types (Jung Classification & Big Five Theory)
- Psychological Attributes in Sports – Self Esteem, Mental Imagery, Self Talk, Goal Setting
- Different types & methods to develop –strength, endurance, and speed in sports training.
- Different types & methods to develop – flexibility and coordinative ability.

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Chemistry
Focussed Topics

- **Unit 1 : Solutions (7 marks)**

  - Expressions of concentration terms, mole fraction, molarity, molality
  - Henry's law and its applications
  - Raoult's law and deviation from Raoult's law (with graphical representation and examples), azeotropes
  - Colligative properties (Elevation of boiling point, depression in freezing point), osmosis and osmotic pressure, reverse osmosis
  - Abnormal molar mass, van't Hoff factor for association and dissociation

- **Unit: Electrochemistry (9 marks)**
  - Cell representation and Electrode reactions, Nernst equation (Numerical based on Nernst equation and its application)
  - Conductivity and Molar conductivity and their variation with concentration
  - Molar conductivity of Strong and Weak electrolytes and their variation with concentration (with graphical representation)
  - Kohlrausch law of' independent migration of ions and numerical

- **Unit: Chemical Kinetics (7 marks)**
  - Rate law and rate constant, units of rate constant, Order of reaction and its calculation using experimental data
  - Rate constant for zero and first order reaction and their graphical representation
  - Half life of reaction for zero and first order reaction

- **Unit: The d- andFBlock Elements (7 marks)**
  - Electronic configuration, atomic and ionic sizes
  - Trends of oxidation states, E° values, Catalytic properties of transition elements and their compounds
  - Magnetic properties, Formation of coloured ions and complexes
  - Oxidation states in lanthanides, Lanthanoid contraction: cause and consequences

- **Unit: Coordination Compounds (7 marks)**
  - Types of ligands and examples, Chelate complexes and chelate effect
  - IUPAC nomenclature of coordination compounds
  - Hybridisation and geometry of complexes, magnetic behaviour
  - Crystal field splitting in octahedral and tetrahedral field

- **Unit: Haloalkanes and Haloarenes (6 marks)**
  - **Name reactions:** Finkelstein reaction, Swarts reaction, Sandmeyer reaction, Wurtz reaction, Fittig reaction, Wurtz-Fittig reaction
  - **Mechanism :** S_N1 and S_N2 reaction: and reactivity order
  - Saytzeff elimination, Grignard reagent

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- Unit: Alcohols, Phenols and Ethers (6 marks)

  - **Name reactions:** Esterification, Acetylation, Reimer-Tiemann Reaction, Kolbe's reaction, Williamson's synthesis
  - **Mechanism:** acid catalysed hydration, acid catalysed dehydration of alcohol to form alkene and ether, Electrophilic substitution reactions of phenol
  - Acidity of phenols and effects of substituents on acidic strength

- Unit: Aldehydes, Ketones and Carboxylic Acids (8 marks)

  - **Name Reactions:** Rosenmund reaction, Gattermann-Koch reaction, Clemmensen reduction, Wolf-Kishner reduction Aldol Condensation, Cross Aldol Condensation, Cannizzaro reaction, Hell-Volhard-Zelinsky (HVZ) reaction
  - **Distinction Tests/Reactions:** 2,4-DNP test, 'Tollens' test, Fehling's test, iodoform test, $NaHCO_3$ test
  - **Nucleophilic addition reactions:** General mechanism, addition of ammonia and its derivatives
  - Acidity of Carboxylic acids and effects of substituents on acidic strength

- Unit: Amines (6 marks)

  - **Name Reactions:** Gabriel phthalimide synthesis, Hoffmann bromamide degradation, Carbylamine reaction
  - **Distinction Tests/Reactions:** Hinsberg test, Azo dye test, Carbylamine test
  - **Electrophilic Substitution reactions:** General mechanism and reactivity of aniline, deactivation with acyl group, inability to undergo Friedel-Crafts reaction
  - Basicity of amines and effect of substitution on basic strength in aromatic amines, comparison of basic strength in gaseous and aqueous medium

- Unit: Biomolecules (7 marks)

  - **Carbohydrates:** Classification of carbohydrates, reactions of D-Glucose, cyclic structure of glucose, glycosidic bond, invert sugar
  - **Proteins:** classification and properties, essential and non-essential amino acids, fibrous and globular proteins, peptide linkage, primary, secondary, tertiary and quaternary structure of proteins, denaturation or protein
  - **Nucleic acid:** nucleosides and nucleotides, DNA & RNA bases, structural and functional differences
  - **Vitamins:** Sources and deficiency diseases

NOTE : Above topics are most frequently asked in exams, but for high scores go through the whole syllabus in detail.