

Class : XI , Term : 1 Syllabus , 2025-2026

Stream : Science

Subject : English core

HORNBILL

PROSE

1. THE PORTRAIT OF A LADY
2. WE ARE NOT AFRAID TO DIE
3. DISCOVERING TUT

POEMS

1. A PHOTOGRAPH
2. THE VOICE OF THE RAIN
3. CHILDHOOD

SNAPSHOT

1. THE SUMMER OF THE BEAUTIFUL WHITE HORSE
2. THE ADDRESS

WRITING SKILLS

1. POSTER MAKING
2. CLASSIFIED ADVERTISEMENT
3. DEBATE
4. SPEECH

GRAMMAR

1. TENSE
2. CLAUSE

COMPREHENSION

NOTEMAKING AND SUMMARY

.....

Subject : Physics

Unit-I Physical World and Measurement	Chapter: Units and Measurements
Unit-II Kinematics	Chapter: Motion in a Straight Line
Unit-III Laws of Motion	Chapter: Laws of Motion
Unit-IV Work, Energy and Power	Chapter: Work, Energy and Power
Unit-VI Gravitation	Chapter: Gravitation

.....

Subject : Chemistry

- **Structure of atom**
- **Redox Reactions**
- **G.O.C**
- **Mole Concept**
- **Periodic Table**

.....

Subject : Maths

Unit-I: Sets and Functions

1. Sets

(20) Periods

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

(20) Periods

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 (upto $R \times R \times R$). 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

(20) Periods

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 $\sin^2 x + \cos^2 x = 1$, 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 $\sin x$, $\sin y$, $\cos x$ & $\cos y$ and their simple applications. Deducing identities like the following:

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

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

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

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

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

(10) Periods

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

(10) Periods

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

3. Permutations and Combinations

(10) Periods

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

4. Binomial Theorem

(10) Periods

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

5. Sequence and Series

(10) Periods

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.

.....

Subject : Biology

CHAPTER NO.	CHAPTER NAME
1.	The Living World
2.	Biological Classification
3.	Plant Kingdom
4.	Animal Kingdom
5.	Morphology of Flowering Plants
7.	Structural Organisation in Animals

.....

Subject : Physical Education

Unit I Changing Trends and Careers in Physical Education

1. Concept, Aims & Objectives of Physical Education
2. Development of Physical Education in India – Post Independence
3. Changing Trends in Sports- playing surface, wearable gear and sports equipment, technological advancements
4. Career options in Physical Education
5. Khelo-India Program and Fit – India Program

Unit II Olympism Value Education

1. Olympism – Concept and Olympics Values (Excellence, Friendship & Respect)
2. Olympic Value Education – Joy of Effort, Fair Play, Respect for Others, Pursuit of Excellence, Balance Among Body, Will & Mind
3. Ancient and Modern Olympics
4. Olympics - Symbols, Motto, Flag, Oath, and Anthem
5. Olympic Movement Structure - IOC, NOC, IFS, Other members

Unit III Yoga

1. Meaning and importance of Yoga
2. Introduction to Astanga Yoga
3. Yogic Kriyas (Shat Karma)
4. Pranayama and its types
5. Active Lifestyle and stress management through Yoga

Unit IV Physical Education and Sports for Children with Special Needs

1. Concept of Disability and Disorder
2. Types of Disability, its causes & nature (Intellectual disability, Physical disability)
3. Disability Etiquette
4. Aim and objectives of Adaptive Physical Education
5. Role of various professionals for children with special needs (Counselor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist, and Special Educator)

Unit V Physical Fitness, Wellness, and Lifestyle

1. Meaning & importance of Wellness, Health, and Physical Fitness
2. Components/Dimensions of Wellness, Health, and Physical Fitness
3. Traditional Sports & Regional Games for promoting wellness
4. Leadership through Physical Activity and Sports
5. Introduction to First Aid – PRICE

.....

Subject : Computer Science

Unit I : 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, NOT, 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 II : 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.

Subject : Psychology

SL NO	Chapter Name
1.	Human Development
2.	Sensory ,Attentional and Perceptual Processes
3.	Learning

PRACTICALS

1. Experiment - Span of Attention
2. Experiment- Impact of Meaningfulness of studying material on learning

.....

Subject : Bengali

PROSE : TELENAPOTA ABISHKAR, BIRAL

POEM: NUN, LALAN SAHA FAKIRER GAAN

SUPPLYMENTARY : BOI KENA, AJOB SOHOR KOLKATA

GRAMMAR : BACHYO PORIBORTON, UKTI PORIBORTON

WRITING : SUMMARY WRITING, DIALOGUE WRITINGS

.....

Subject : Hindi

गद्य (आरोह पाठ्य पुस्तक)

- *नमक का दरोगा
- *मियाँ नसीरुद्दीन
- *अप्पू के साथ ढाई साल
- *विदाई संभाषण
- *गलता लोहा

काव्य खंड (आरोह पाठ्य पुस्तक)

- * कबीर – पद 1
- *मीरा – पद 1
- *भवानी प्रसाद मिश्रा
- *त्रिलोचन
- *दुष्यंत कुमार

(वितान पाठ्य पुस्तक)

- *लता मंगेशकर
- *राजस्थान की रजत बूंदें

(अभिव्यक्ति और माध्यम पाठ्य पुस्तक)

- पाठ 1,2, 9,10,14,15 & 16
- रचनात्मक लेखन
- अपठित गद्यांश एवम् काव्यांश

.....