

ST. THOMAS SCHOOL, LONI
SYLLABUS 2024- 2025
HALF YEARLY
CLASS: XI- SCIENCE

SUBJECT-ENGLISH

Prescribed Books: 1) Hornbill

2) Snapshots

Publisher- NCERT

Reading Comprehension-

1. Unseen passage- (The passage may be factual, descriptive or literary/discursive or persuasive)
2. Note -making and summarising

Advanced Writing Skills

1. Short Composition- Poster
2. Long Composition- Speech

Grammar (Integrated)

1.Tenses

2.Sentence reordering

Literature- Questions based on extracts/texts to assess comprehension and appreciation, analysis, inference and extrapolation

Book- **Hornbill**

Ch.1-Portrait of the Lady

Ch.-2 We're Not Afraid To Die.....

Ch-3 Discovering Tut

Poems

1. A Photograph
2. The Laburnum Top (Poem)

Book- **Snapshots**

Ch-1 Summer of the Beautiful White Horse

Ch-2 The Address

SUBJECT- PHYSICS

BOOK: publisher NCERT

Ch.1	Units and Measurements
Ch.2	Motion in a straight line
Ch. 3	Motion in a plane
Ch.4	Laws of Motion
Ch.5	Work, Energy and Power
Ch.6	System of particals and rotational motion

SUBJECT- CHEMISTRY

BOOK-NCERT

TEXT BOOK-CHEMISTRY

PUBLISHERS-NCERT

Chapter-1	SOME BASIC CONCEPTS OF CHEMISTRY
Chapter-2	STRUCTURE OF ATOM
Chapter-3	CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES
Chapter-4	CHEMICAL BONDING AND MOLECULAR STRUCTURE

SUBJECT- BIOLOGY

TEXT BOOK-BIOLOGY

PUBLISHERS-NCERT

Chapter-1	The living world
Chapter-2	Biological classification

Chapter-3	Plant kingdom
Chapter-4	Animal kingdom
Chapter-5	Morphology of flowering plants
Chapter-6	Anatomy of flowering plants
Chapter-7	Structural organisation in animals
Chapter-8	Cell-the unit of life
Chapter-10	Cell cycle and cell division

SUBJECT: MATHEMATICS

Main course book: N.C.E.R.T

Reference Book: R. D. SHARMA

CHAPTER NO.	CHAPTER NAME
Chapter-1	Sets
Chapter -2	Relations and Functions
Chapter -3	Trigonometric Functions
Chapter-4	Complex Numbers and Quadratic Equations
Chapter-5	Linear Inequalities
Chapter -6	Permutations and Combinations
Chapter -7	Binomial Theorem

SUBJECT- COMPUTER SCIENCE

Book- Computer Science with Python

Publisher- Sultan Chand

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 & interpreter), application software
- Operating system (OS): functions of operating system, OS user interface
- 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 – 1

- Introduction to problem solving: Steps for problem solving (analysing the problem, developing an algorithm, coding, testing and debugging). representation of algorithms using flow chart and pseudo code, 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 operator, augmented assignment operators, identity operators (is, is not), membership operators (in, not in)
- Expressions, statement, type conversion & input/output: precedence of operators, expression, evaluation of expression, python statement, type conversion (explicit & implicit conversion), accepting data as input from the console and displaying output
- Errors: syntax errors, logical errors, runtime errors
- Flow of control: introduction, use of indentation, sequential flow, conditional and iterative flow control
- Conditional statements: if, if-else, if-elif-else, flowcharts, simple programs: e.g.: absolute value, sort 3 numbers and divisibility of a number

Unit III: Society, Law and Ethics

- Digital Footprints
- Digital society and Netizen: net etiquettes, communication etiquettes, social media etiquettes

- Data protection: Intellectual Property Right (copyright, patent, trademark), violation of IPR (plagiarism, copyright infringement, trademark infringement), open source softwares and licensing (Creative Commons, GPL and Apache)
- Cyber-crime: definition, hacking, eavesdropping, phishing and fraud emails, ransomware, preventing cyber crime

SUBJECT- PAINTING

SUBJECT CODE- 049

Book: Panoramic Indian painting

Publisher: Vishal Publication

Unit-1

Pre-historic rock paintings and art of Indus Valley

Unit-2

Buddhist, Jain and Hindu Art

SUBJECT- PHYSICAL EDUCATION

- **UNIT 1 - Changing Trends & Career in Physical Education**
- **UNIT 2 - Olympic Value Education**
- **UNIT 3 - Yoga**
- **UNIT 4 - Physical Education & Sports for CWSN**
- **UNIT 5- fitness, wellness and healthy life style**

CARNATIC MUSIC

VOCAL CODE 031

TEXT BOOK- SOUTH INDIAN MUSIC BOOK BY SAMBAMOORTHY

PUBLISHER- INDIAN MUSIC PUBLISHING HOUSE, MADRAS

Chapter 4	Biographies – Annamacharya, Gopalakrishna Bharati, Swati Tirunal, Patnam Subramanya Iyer
Chapter 5	Musical forms – Kriti, Padam, Javali, Ragamalika, Tirupugazh
Chapter 6	Lakshana Grandhas – Sangita Saramrita, Sangita Sampradaya Pradarshini

PSYCHOLOGY

MAIN COURSE BOOK:

PSYCHOLOGY NCERT

Chapter 1	What is psychology?
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Chapter 2	Methods of enquiry in psychology
Chapter 4	Human development
Chapter 7	Human memory