



ARMY PUBLIC SCHOOL CLEMENT TOWN

CLASS -XII (SCIENCE STREAM)

PT-I SYLLABUS (2025-26)

Informatics Practices

1. Python Pandas

- * General characteristics
- * Pandas Series
- * Pandas DataFrame

Biology

Ch 1 - Sexual reproduction in flowering plants

Ch 2 - Human reproduction

Ch 3 - Reproductive health

Ch 4 - Principles of inheritance and variations

Physics

UNIT 1 - ELECTROSTATIC

Ch1 - Electrostatic Charges, Electric Field

Ch3 - Electrostatic Potential and Flux

Ch4 - Capacitance

UNIT 2 - CURRENT ELECTRICITY

Chemistry

Chapter 1 - Solutions

Chapter 2 - Electrochemistry

Chapter 3 - Chemical Kinetics

Mathematics

Chapter 1 - Relations and functions

Chapter 2 - Inverse trigonometric functions

Chapter 3 - Matrices

Chapter 4 - Determinant

Psychology

Ch 1 - Variations in Psychological attributes

Ch 2 - Self & Personality

English

1. Comprehension Passage

2. Notice Writing

3. Letter to the Editor

4. The Last Lesson, The Third Level The Tiger King, My Mother At Sixty six and Keeping Quiet

Physical Education

Unit 1. Management of Sporting Events

Unit 2. Children & Women in Sports

Unit 3. Yoga As Preventive Measures for Lifestyle Disease

Computer Science

Unit 1: Computational Thinking and Programming – 2

- Revision of Python topics covered in Class XI.
- **Chap 1: 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)

●**Chap 2: Exception Handling:** Introduction, handling exceptions using try-except-finally Blocks

●**Chap 3: File handling:** 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()