

ARMY PUBLIC SCHOOL, MUMBAI (2019-2020)
STANDARD CURRICULUM

CLASS:XI

SUB: INFORMATICS PRACTICES

MONTH	CHAPTER	ACTIVITY	VALUES	CORE VA
APRIL	1. Basic Computer Organization 2. Getting Started with Python	Discussion and Demonstration of the basic structure of the computer system and how it works. Introduction to the programming logic using Python programming lanugage.	Building Logic, Problem solving ability	Discipline and
May / June	4. Python Fundamentals	To understand the concept of computer programming like character set, variables, keywords, identifiers and operators .Discussion, Interaction, Problem Solving, Demonstration of computer programs.	Logical thinking, Scientific attitude, Arithmetic skills.	Building self confidence and awareness
July	6. Conditional and Iterative Statements	Using Flowcharts, Decision trees for program logic development. Making them understand the decision making process in a program using - if - else - if - statements. Also understanding the Iteration technique used in a program to repeat the statements continuously for a specific period of time.	Scientific attitude, Knowledge, confidence, Logical thinking, Critical thinking, Problem solving. Creative skills, Decision making and Analytical skills	Efficient manager
August	5. Data Handling 7. Text Handling	To make them understand how different types of operators are used in a program and how they effect the Number and Strings. Also how to traverse, slice a string and use string functions	Selecting right choice, optimism, vision, critical thinking. Analytical skills and logical presentation.	Diversity together
Sept	8. List Manipulation	Discussion on advantages of a List, Creating, Accessing, Joining and Slicing a list. Function and methods for working with List.	Imagination, Analytical thinking, knowledge	Spirit of adventure
Oct	9. Dictionaries	Characteristics of a dictionary. Multiple ways of creating a dictionary. Adding, Updating, Deleting values in the dictionary.	Networking skills, Logical thinking, reasoning, Awareness, Team work	Commitment, Open-minded
Nov	10. Working with Numpy	To understand what are Numpy Arrays and how are they useful. Demonstration of experiments, Problem solving	Understanding real world applications, Scientific attitude, Logical thinking, problem solving.	Spirit of adventure

Dec	11. Relational Databases 12. Simple Queries in SQL	To understand how data can be stored, extracted and modified using MySql within a given time frame.	Time management, Logical thinking, critical thinking, scientific attitude, awareness	Dependability Efficiency
Jan	13. Table creation and Data manipulation	Discussion on using MySql to create and modify a database	Time management, Analysis and logical thinking	Innovation and Creativity
Feb	Cyber Safety and Revision	To understand the concept of - online applications and their use. How to remain safe online? What is cyber crime? Threats to computer security.	Near to the real world problems, Reasoning, knowledge, self awareness.	Loyalty, Open mindedness ,