

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

CLASS: XII

SUB: INFORMATICS PRACTICES

<u>MONT H</u>	<u>CHAPTER</u>	<u>ACTIVITY</u>	<u>VALUES</u>	<u>CORE VALUES</u>
April	10. Interface Python with MySQL	To understand the concept of Database management. Connecting Front end application with the Backend application	Networking skills, Logical thinking, reasoning, Awareness, Team work	Spirit of adventure, Team work
May /June	1. Working with Numpy	To understand the concept of Numpy Array, Discussion, Interaction, Problem Solving, Demonstration of computer programs.	Logical thinking, Scientific attitude, Arithmetic skills.	Dependability, Discipline and Diligence
July	2. Python Pandas	To understand the concept of python pandas by creating DataFrames, Accessing / Deleting / Modifying values from the dataframe. Discussion, Interaction, Problem Solving, Demonstration of computer programs.	Critical and Logical thinking, Scientific methods, Arithmetic skills.	Innovation, Creativity, Compassion
August	7. MySql Revision Tour 8. More on SQL	To understand how data can be extracted and modified within a given time frame. How a single record can be extracted from thousand of records within few seconds, Demonstration of experiments, Problem solving	Problem solving skills, Curiosity, Knowledge, Confidence, Scientific attitude	Spirit of adventure, Motivation
Sept	3. Plotting with Pyplot I 4. Plotting with Pyplot II	Discussion, Explanation, Demonstration of some advanced data visualization techniques using Bar Chart, Line and Scatter Chart, Histogram, Boxplot, etc.	Logical thinking, reasoning, curiosity on near to the real world applications, confidence, self awareness, Creative thinking	Self Awareness and Confidence
Oct	5. Introduction to software Engineering 6. Agile methods and practical	Discussion on what are the steps to be followed while designing a software. Different software process models.	Time management, Logical thinking, critical thinking, scientific attitude, awareness	Team Work, Dependability

	aspects of software Engineering			
Nov	9. Creating a Django based web application	Discussion on how web, Websites and Web Applications work.To create Django based web applications.	Understanding real world applications building knowledge, Logical thinking, problem solving.	Efficiency,Service to others
	11. Society, Law and Ethics	To understand the concept of - online applications and their use. Ethical issues, privacy, online frauds, cybercrime, cyberlaw	Near to the real world problems, knowledge, self awareness.	Environmentalism, Patriotism, Honesty