

CLASS XI			SUBJECT: IP (065)
SN	Month	No. of working days	Name of the chapter/topic to be covered
1	JUNE	8	<b>Unit 1: Introduction to Computer System</b> Introduction to computer and computing: evolution of computing devices, components of a computer system and their interconnections,
2	JULY	25	Input/output devices. Computer Memory: Units of memory, types of memory – primary and secondary, data deletion, its recovery and related security concerns. Software: purpose and types – system and application software, generic and specific purpose software  Unit 2: Introduction to Python Basics of Python programming, execution modes: - interactive and script mode, the structure of a program, indentation, identifiers, keywords, constants, variables, types of operator, precedence of operators
3	AUGUST	23	data types, mutable and immutable data types, statements, expression evaluation, comments, input and output statements, data type conversion, debugging. Control Statements: if- else, if-elif-else, while loop, for loop
4	SEPTEMBER	24	Lists: list operations - creating, initializing, traversing and manipulating lists, list methods and built-in functions – len(), list(), append(), insert(), count(), index(), remove(), pop(), reverse(), sort(), min(), max(), sum()  Dictionary: concept of key-value pair, creating, initializing, traversing, updating and deleting elements, dictionary methods and built-in functions – dict(), len(), keys(), values(), items(), Introduction to NumPy: Introduction, Creation of NumPy Arrays from List
5	OCTOBER	0	Unit 3: Database concepts and the Structured Query Language Database Concepts: Introduction to database concepts and its need, Database Management System.

			Relational data model: Concept of domain,tuple, relation,candidate key, primary key, alternate key Advantages of using Structured Query Language, Data Definition Language, Data Query Language and Data Manipulation Language,
6	NOVERBER	23	Introduction to MySQL, creating a database using MySQL, Data Types Data Definition: CREATE DATABASE, CREATE TABLE, DROP, ALTER Data Query: SELECT, FROM, WHERE with relational operators, BETWEEN, logical operators, IS NULL, IS NOT NULL Data Manipulation: INSERT, DELETE,UPDATE
7	DECEMBER	18	Unit 4: Introduction to the Emerging Trends Artificial Intelligence, Machine Learning, Natural Language Processing, Immersive experience (AR, VR),
8	JANUARY	24	Robotics, Big data and its characteristics, Internet of Things (IoT), Sensors, Smart cities, Cloud Computing and Cloud Services (SaaS, IaaS,PaaS); Grid Computing, Block chain technology.
9	February	23	Revision, conducting practical