ARMY PUBLIC SCHOOL, BANGALORE
SPLIT UP SYLLABUS 2025-26

CLASS -   XI
SUBJECT-   INFORMATICS PRACTICES

SL. NO.	MONTH	CONTENT
1.	JUNE	**Unit 1:-** **Introduction to Computer System** Basics of Computer systems, Components, I/O, 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, Python interpreter - interactive and script mode, the structure of a program,
3.	JULY	**Unit 2: Introduction to Python (Contd ...)** Indentation, identifiers, keywords, constants, variables, types of operators, Precedence of operators, data types, mutable and immutable data types. Statements, expressions, evaluation .
4.	AUG	**Unit 2: Introduction to Python (Contd ...)** Input and output statements, data type conversion, comments, debugging. Control Statements: if-else, if-elif-else, for loop .
5.	SEP	**Unit 2: Introduction to Python (Contd ...)** While loop Revision

6.	**OCT**	Unit 2: Introduction to Python (Contd ..) 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(), update(), del(), clear() Introduction to NumPy: Introduction, Creation of NumPy Arrays from List
7.	**NOV**	**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, Advantages of using Structured Query Language, Data Definition Language, Data Query Language and Data Manipulation Language **Database Concepts:** Introduction to MySQL, creating a database using MySQL, Data Types Data Definition: CREATE DATABASE
8.	**DEC**	**Unit 3: Database concepts and the Structured Query Language** **Database Concepts:** CREATE TABLE, DROP, ALTER, Data Manipulation: INSERT, DELETE, Data Query: SELECT, FROM, WHERE with relational operators, BETWEEN, logical operators, IS NULL, IS NOT NULL
9.	**JAN**	**Unit 3: Database concepts and the Structured Query Language** **Database Concepts:**

		Data Manipulation: UPDATE, Candidate key, primary key, alternate key
		Unit 4: Introduction to the Emerging Trends
		Artificial Intelligence, Machine Learning, Natural Language Processing, Immersive experience (AR, VR), 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.
		Revision
10.	**FEB**	Revision Annual Exam Practicals Annual Exam
11.	**MARCH**	Annual Exam

BOOKS: NCERT Informatics Practices - Text book for class - XI