

Syllabus of Class XI (2025-26)
Informatics Practices (065)

Week/Month	Chapters/ Topics	Subtopics	Total No. Of Periods
28 th April 2 nd May	Unit 2: Introduction to Python	Basics of Python programming, Python interpreter - interactive and script mode The structure of a program, indentation, identifiers, keywords, constants, variables, types of operators, precedence of operators,	7 Theory
4 th May to 8 th May	Unit 2: Introduction to Python	Data types, mutable and immutable data types, statements, expressions, evaluation of expressions, comments, input and output statements, data type conversion, debugging.	7 Theory
12 th May to 24 th May	Unit 2: Introduction to Python	Control statements: if statement, if-else, Control statements: if -elif Statement, nested if-else statement, for loop, while loop, break, continue, pass statements	10 Theory 5 Practical
30 th June to 12 th July	Unit 2: Introduction to Python	List operations - creating, initializing, traversing and manipulating lists, list methods and built-in functions.: len(), list(), append(), extend(), insert(), count(), find(), remove(), pop(), reverse(), sort(), sorted(), min(), max(), sum(), index()	7 Theory 7 Practical
15 th July to 8 th August	Unit 2: Introduction to Python	Dictionary: concept of key-value pair, creating, initializing, traversing, updating and deleting elements, dictionary methods and built-in functions: len(), dict(), keys(), values(), items(), get(), update(), clear(), del() Introduction to Numpy: Introduction, creation of Numpy Array from list.	7 Theory 7 Practical
11 th August to 14 th August	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 attribute, domain, tuple, relation.	3 Theory 2 practical
18 th August to 29 th August	Unit 3: Database concepts and the Structured Query Language	Candidate key, primary key, alternate key, foreign key. Structured Query Language: Data Definition Language, Data Query Language and Data, Manipulation Language, Introduction to MySQL: Creating a database, using database, showing tables using MySQL,	4 Theory 3 Practical
1 st Sep to 10 th Sep	Unit 2 & 3:	Revision of Unit 2 & Unit 3	7 Theory
1 st October to 24 th October	Unit 3: Database concepts and the Structured Query Language	Data Types : char, varchar, int, float, date. Data Definition Commands: CREATE, DROP, ALTER (Add and Remove primary key, attribute).	4 Theory 3 Practical

27 th October to 14 th November	Unit 3: Database concepts and the Structured Query Language	Data Query Commands: SELECT-FROM- WHERE, LIKE, BETWEEN, IN, ORDER BY, using arithmetic, logical, relational operators and NULL values in queries, Distinct clause Data Manipulation Commands: INSERT, UPDATE, DELETE.	4 Theory 3 Practical
17 th Nov to 30 th Nov	Unit 1: Introduction to Computer System	Introduction to computers and computing: evolution of computing devices, components of a computer system and their interconnections, Input/Output devices.	9 Theory
1 st Dec 19 th Dec	Introduction to Computer System	Software: purpose and types – system and application software, generic and specific purpose software.	8 Theory
22 nd Dec to 16 th Jan	Unit 4: Introduction to the Emerging TrendsI	Artificial Intelligence, Machine Learning, Natural Language Processing, ● Immersive experience (AR, VR), Robotics Big data and its characteristics, Internet of Things	4 Theory Practical
19 th Jan to 30 th Jan	Unit 4: Introduction to the Emerging TrendsI	Cloud Computing and Cloud Services (SaaS, IaaS, PaaS); Grid Computing, Block chain technology.	5 Theory 5 5 Practical
1 st Feb to 15 th Feb		Revision Unit 1 & Unit 4	14 Theory