

Class XII Informatics Practices Syllabus (Session 2026–27)

Month	Topic	Learning Outcomes	Resources/Art-Integrated Pedagogy Tools Used/E-Resources	Learning Outcomes / Skills Learnt by Students
April	Revision Tour XI; Database Query using SQL	Recall and apply Class XI concepts; Understand relational databases; Write SQL queries using SELECT, WHERE, ORDER BY; Use aggregate functions (SUM, COUNT, AVG); Retrieve and manipulate data; Apply logical operators and conditions	Lecture Method & Practical implementation	• SQL and its Functions • Practical Implementation Date and Time functions , Math Functions • Group by ,having clause and working with Equi-join
May	Data Handling using Pandas – I (Visualization)	Understand importance of data visualization; Use Pandas & Matplotlib; Create plots (line, bar, histogram, pie);	Practical Implementation	Creation of graphs using Pandas

		Interpret graphical data; Choose appropriate visualization techniques		
June	Summer Vacation			
July	Data Handling using Pandas – I (Series); Societal Impacts	Define and create Pandas Series; Perform indexing, slicing, and mathematical operations; Handle missing data; Understand societal impact of technology; Learn cyber safety, privacy, and ethical issues	Lecture Method	• What are Digital FootPrints,Netiquettes , FOSS • cybercrime and cyber laws, hacking, phishing, cyber bullying,
August	Introduction to Computer Networks	Understand networking basics; Identify types of networks (LAN, WAN); Learn about devices (router, switch, modem); Understand transmission media; Basics of internet and protocols	Lecture Method	• What is networks, Types of network: PAN, LAN, MAN, WAN. • Network Devices: modem, hub, switch, repeater, router, gateway Network Topologies: Star, Bus, Tree, Mesh.

September	Term Examination			
October	Data Handling using Pandas – I (DataFrame)	Create and work with DataFrames; Perform row/column selection, filtering, sorting;	Practical Implementation	Data Structures in Pandas
November	Data Handling using Pandas – I (DataFrame) CONTINUE	Import/export CSV files; Handle missing values; Analyze structured data	Practical Implementation	"What are Data Frames? Creation of Data Frames"