



THE LEXICON SCHOOLS
(Wagholi • Hadapsar • Kalyani
Nagar)
Curriculum 2023-24

Class XII

Subject: Informatics Practices

Subject Code: 065

Term	Month	Portion to be covered
	April	Unit 1. Python Pandas -1 <ul style="list-style-type: none"> • Introduction to Python libraries- Pandas, Matplotlib. • Data structures in Pandas - Series and data frames.
Term I	June	Unit 1. Python Pandas -1 <ul style="list-style-type: none"> • Series: Creation of series from Nd array, dictionary, scalar value; mathematical operations, head and tail functions; selection, indexing, and slicing. • Data Frames: Creation of data frames from the dictionary of series, list of dictionaries, Text/CSV files, display; iteration.
	July	Unit 1. Python Pandas -I <ul style="list-style-type: none"> • Operations on rows and columns, Head and Tail functions, indexing using labels, Boolean indexing.
	August	Unit 1. Python Pandas -I <ul style="list-style-type: none"> • Transferring Data between .csv files and Data Frame. • Data Visualization: Purpose of plotting, drawing, and saving plots using Matplotlib, Plotting line plot, bar graph, and histogram. • Customizing plots: adding labels, titles, and legends in plots.
	September	Unit 2: Database Query using SQL <ul style="list-style-type: none"> • Math functions: POWER (), ROUND (), MOD (). • Text functions: UCASE ()/UPPER (), LCASE ()/LOWER (), MID ()/SUBSTRING ()/SUBSTR (), LENGTH (), LEFF (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM (). • Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME (). Unit 2: Database Query using SQL <ul style="list-style-type: none"> • Aggregate Functions: MAX (), MIN (), AVG ()' SU. M ()' COUbnT (H); u-sning COUNT (*). Querying and manipulating data using Group y,av1 g, Order by. Unit 3: Introduction to Computer Networks <ul style="list-style-type: none"> • Introduction to networks, Types of networks: LAN, MAN, WAN. Network Devices: modem, hub, switch,

		repeater, router, gateway.
Term II	October	<p>Unit 3: Introduction to Computer</p> <ul style="list-style-type: none"> • Networks Network Topologies: Star, Bus, Tree, Mesh. • Introduction to Internet, URL, WWW, and its applications- Web, email, Chat, VoIP. • Website: Introduction, the difference between a website and webpage, static vs dynamic web page, web server, and hosting of a website. • Web Browsers: Introduction, commonly used browsers, browser settings, add-ons and plug-ins, cookies.
	November	<p>Unit 4: Societal Impacts</p> <ul style="list-style-type: none"> • Digital footprint, Net and communication etiquettes, data protection, intellectual property rights (IPR), plagiarism, licensing and copyright, Free and open-source software (FOSS), Cybercrime and cyber laws, hacking, phishing, cyberbullying, an overview of Indian IT Act. • E-waste: hazards and management. Awareness about health concerns related to the usage of technology.
	December	Revision
	January	Revision