

LOVE DALE RESIDENTIAL SCHOOL (SENIOR SECONDARY)

YEAR PLAN FOR ACADEMIC SESSION: 2024-25

Class: XII

Subject: INFORMATICS PRACTICES

Sl. No	Month	Unit no	Name of the chapter/to be covered	TeachingAids/E-Content/Innovativepracticestobe adopted	Practicals/project
1	JUNE	Unit II	DatabaseQueryusingSQL <ul style="list-style-type: none"> •StructuredQueryLanguage •Mathfunctions • Textfunctions • Date Functions •Aggregate Functions •COUNT (); using COUNT (*). •manipulating data using Group by, Having, Order By 	MySQLDatabaseSoftware.	SQL queries lab activity SQLcommand sinmysqlfor group by & order by
2	JULY	Unit I	DataHandlingusingPandas <ul style="list-style-type: none"> • Data structures in Pandas - Series and Data Frames • CreationofSeriesfrom-ndarray,dictionary,scalarvalue; •mathematicaloperations; •HeadandTailfunctions; •Selection,IndexingandSlicing. • DataFrames:creation-fromdictionaryofSeries,listof Dictinories 	Python Programming software Installing pip ,pandas,numpy	Project planning •Data collection •starting record writing
3	AUGUST	Unit I (continues...)	Files in pandas <ul style="list-style-type: none"> • Text/CSVfiles;display;iteration; • Operations on rows and columns: add, select, delete,rename;HeadandTailfunctions;Indexingusing Labels,Boolean Indexing;Importing/Exporting DatabetweenCSVfilesandDataFrames. 	PythonProgrammingtools(IDLE/Anacondanavigator)	CSV File programs lab activity Project data organizing

			<ul style="list-style-type: none"> • Indexing using Labels, Boolean Indexing; Importing/Exporting Data between CSV files and DataFrames. 		
4	SEPTEMBER	Unit I (continues...)	<p>Visualization Purpose of plotting</p> <ul style="list-style-type: none"> • Purpose of plotting; drawing and saving following types of plots using Matplotlib – line plot, bar graph, histogram • Customizing plots: adding label, title, and legend in plot 	<p>Python Programming software</p> <p>Installing matplotlib</p>	<p>matplotlib program lab activity</p> <p>Project code correction</p>
5	OCTOBER	Unit III	<p>Computer Networks</p> <ul style="list-style-type: none"> • Network Topologies: Star, Bus, Tree, Mesh. • Introduction to Internet, URL, WWW, and its applications- Web, email, Chat, VoIP. • Website: 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 	<p>Power Point Presentation on Networks.</p>	<p>Project testing/ Record correction</p>

6	NOVEMBER	Unit III	<p>Society, Law & Ethics</p> <ul style="list-style-type: none"> • Societal Impacts Digital footprint, net and communication etiquettes • Data protection, intellectual property rights (IPR) • Cybercrime and cyber laws, • hacking, phishing, cyberbullying, • overview of Indian IT Act. • E-waste: hazards and management. • Awareness about the health concerns related to the use of technology 	Seminars, presentations prepared by Students	Project/record Completion & correction
7	DECEMBER		Revision work & Model practical Lab exams		Preboard-I
8	JANUARY		Remedial classes & Practical Examinations		Preboard-II
9	FEBRUARY		Remedial classes		Board Examinations

