

LOVE DALE RESIDENTIAL SCHOOL (SENIOR SECONDARY)

YEAR PLAN FOR ACADEMIC SESSION: 2024-25

Class:XI

Subject:INFORMATICS PRACTICES

S.No	Month	Unit no	Name of the chapter/topic to be covered	Teaching Aids/E-Content/Innovative practices to be adopted	Practicals/project
1	JUNE	Unit I	Introduction to Computer System <ul style="list-style-type: none"> • Input/output devices. • Computer Memory: Units of memory, types of memory – primary and secondary, data deletion, its recovery and related security concerns. • Types of software Software: purpose and types – system and application software, generic and specific purposes of software. 	Powerpoint presentation or E-content on	ASSIGNMENT I/O Devices
2	JULY	Unit II	Introduction to Python Basics of Python programming <ul style="list-style-type: none"> • Basics of Python programming, Python interpreter – • interactive and script mode, the structure of a program, indentation, identifiers, keywords, constants, variables, • operators, precedence of operators, datatypes, mutable and immutable datatypes, statements • executing a simple "helloworld" program 	Python Programming tools (IDLE/Anaconda navigator)	Python program lab activity beginning • starting Rough record writing

3	AUGUST		<ul style="list-style-type: none"> • Python tokens • variables • Data types: mutable and immutable datatypes • Operators • Type conversion (explicit & implicit conversion) Errors: syntax errors, logical errors, runtime errors • Flow of control: introduction, use of indentation, sequential flow, conditional and iterative flow control 	Powerpoint presentation or E-content on PYTHON	Python program lab activity
4	SEPTEMBER	Unit III	<p>Database concepts and the Structured Query Language</p> <ul style="list-style-type: none"> • Database concepts • Structured Query Language • Database Management System. • Relational data model: Concept of domain, • Data Definition Language, Data Query Language and Data Manipulation Language, 	SQL INSTALLATION	SQL lab INTRODUCTION
5	OCTOBER	Unit III (continues...)	<p>Introduction to MySQL,</p> <ul style="list-style-type: none"> • CREATE DATABASE, • CREATE TABLE, DROP, ALTER • Data Query: SELECT, FROM, WHERE with relational operators 	Tutorial on data types	SQL LAB QUERYING

6	NOVEMBER	Unit III (continues...)	BETWEEN, logical operators, IS NULL, IS NOT NULL Data Manipulation: INSERT, DELETE, UPDATE		record Completion & correction
7	DECEMBER	Unit III	Introduction to the Emerging Trends <ul style="list-style-type: none"> • Artificial Intelligence • Machine Learning, • Natural Language Processing • 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. 	Seminars, presentations prepared by Students	Revision on lab programs
8	JANUARY		Revision work /practical lab exam		
9	FEBRUARY		Exam		

