BAGARIA BAL VIDYA NIKETAN
LAXMANGARH SIKAR
SYLLABUS & LESSON PLANNER - 2024-2025

Class	XI						
Subject	Informatics Practices						
Teacher Nar	Pawan Saini						

Syllabus

Unit	Name of Book	Name of Chapter	Working Day	Period	Topic	Month	Week
Unit 1		Introduction to Computer System	36	47	Introduction to computer and computing: evolution of computing devices, components of a computer system and their interconnections, Input/output devices. Computer Memory: Units of memory, types of memory – primary and secondary, data deletion, its recovery and related security concerns. Software: purpose and types – system and application software, generic and specific purpose software.	April & May	6
Unit 2	Computer Science With Python	Introduction to Python	37	48	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, data types, mutable and immutable data types, statements+E14, expressions, evaluation and comments, input and output statements, data type conversion, E14debugging. Control Statements: if-else, if-elif-else, while loop, for loop Lists: list operations - creating, initializing, traversing and manipulating lists, list methods and built-in functions – len(),list(),append(),insert(), count(),index(),remove(), pop(), reverse(), sort(), min(),max(),sum() Dictionary: concept of key-value pair, creating, initializing, traversing, updating and deleting elements, dictionary methods and built-in functions – dict(), len(), keys(), values(), items(), update(), del(), clear()	June & July	6

Unit 3		Database concepts and the Structured Query Language	47	62	Database Concepts: Introduction to database concepts and its need, Database Management System. Relational data model: Concept of domain, tuple, relation, candidate key, primary key, alternate key Advantages of using Structured Query Language, Data Definition Language, Data Query Language and Data Manipulation Language, Introduction to MySQL, creating a database using MySQL, Data Types Data Definition: CREATE DATABASE, CREATE TABLE, DROP, ALTER Data Query: SELECT, FROM, WHERE with relational operators, BETWEEN, logical operators, IS NULL, IS NOT NULL Data Manipulation: INSERT, DELETE,UPDATE	August & September	8
Unit 4		Introduction to the Emerging Trends	23	30	Artificial Intelligence, Machine Learning, Natural Language Processing, Immersive experience (AR, VR), 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.	Nov.	4