

**BAGARIA BAL VIDYA NIKITAN**

**LAXMANGARH-SIKAR**

**SYLLABUS & LESSON PLANNER-2023-24**

<b>Class:-</b>	XI
<b>Subject:-</b>	IP
<b>Teacher Name:-</b>	

**SYLLABUS**

Ch.No	Name of Chapter	working day	Period	Topic	Month	Week
1	Computer System	9	11	Introduction	June	3
				Computer System		3
				Computer Organisation		3
				Input and Output Units		3
				The CPU		4
				The Memory Unit		4
				Cache Memory		4
				The Storage Unit	4	
				The System Bus	July	1
				Computer System & Data		1
				System Software		1
				Application Software		2
				Proprietary Software		2
				Open Source Software		2
2	Getting Started with Python	26	21	Introduction		3
				Python - Pluses		3
				Python Some Minuses		4
				working in Python (Spyder)		4
				Understanding First Program /script		4
				Introduction		1

3	Python Fundamentals	23	30	Python Character Set	Aug	1
				Tokens		1
				Keywords		1
				Identifier		2
				Literals		2
				Operators		2
				Punctuators		2
				Barebones of Python Program		3
				Variables and Assignments		3
				Creating a variable, Multiple assignment		3
				Variable definition		3
				Dynamic Typing		4
				Simple input and Output		4
				reading numbers		4
output through print() function	4					
4	Data Handling	25	34	Introduction	Sep	1
				Data Types- Numbers, Strings, List and Tuples, Dictionary		1
				Mutable and Immutable Types		1
				Operators - Arithmetic, Relational, Identity, Logical		1
				Operator Precedence		2
				Expression- Evaluating Expressions		2
				Type Casting		2
				working with math module of Python		2
				debugging- Errors in Program		3
5	Flow of Control	25	34	Introduction		3
				Types of statements in Python		3
				statement flow control		3
				the If statement of Python- if, if-else, if-elif, nested if		4
				repetition of Tasks- a Necessity		4

				The range( ) function		4
				Iteration/ Looping Statements- for, nested, while	Oct	
6	List Manipulation	21	27	Introduction	Nov	
				Creating and Accessing a lists		1
				List operations- Joining, repeating, slicing		1
				Making True copy of lists		1
				list functions and methods		1
				a list can contain lists as elements		2
				working with lists (list manipulation)		2
				Appending elements to a list		2
				Inserting an element in list		3
				modifying elements to a list		3
				deleting an element from list		4
				sorting a list		4
				7		Dictionaries
dictionary- Key:Value pairs	1					
Creating, Accessing a dictionary	1					
Characterstics of a dictionary	1					
working with dictionaries- Multiple way to create diction	1					
adding elements, Updating, Deleting, checking for existe	2					
preety printing	2					
Dictionary function and methods	2					
get length	2					
creating new dictionary	2					
accessing items, keys and values	3					
extend/ Update dictionary	3					
deleting elements from dictionary	3					
				Introduction		3
				what is data and its purpose?		4

8	Understanding Data	23	30	Importance of data,		4
				types of data		4
				data processing Cycle		4
				basics statistical techniques of data processing		4
9	Working with Numpy	24	18	Introduction	Jan	1
				Numpy Array- Anatomy, Anupy vs Python List		1
				Numpy Data Types		2
				Creating Numpy Array- 1D, 2D, Internally Stored Data		2
				Working with Numpy array- Accessing, Modifying, Slicing		3
				Arithmetic Operation on ID, 2D		3
				Using functions with Numpy arrays- count( ), mode( )		4
10	Database Concepts	23	30	Introduction		1
				File Based System		1
				Introducing database system- DBMS, Converting, Key Co		1
				RDBMS		1
				Relational Model Terminology		1
				Brief History of MySQL		2
				MySQL Database System		2
				MySQL and SQL		2
				Introduction		2
11	Structured Query Language			MySQL Elements- Literals, data types, Null values, Comm	Feb	2
				SQL command Syntax		3
				databases in MySQL- Creating, Opening, removing datab		3
				Creating Tables		3
				Inserting data in Tables		3
				Making Simple Select Queries		3
				More DML commands		4
				More DDL commands		4
				Introduction		4

12	Emerging Trends		Artificial Intelligence	4
			Robotics	4
			Big Data	4
			Internet of things	4
			Cloud Computing	4
			Grid Computing	4
			Blockchain Technology	4