BAGARIA BAL VIDYA NIKETAN

LAXMANGARH-SIKAR

SYLLABUS & LESSON PLANNER-2023-24

Class:-	XII
Subject:-	IP
Teacher Name:-	

SYLLABUS

Ch.No	Name of Chapter	working day	Period	Topic	Month	Week
1	Python Pandas- I	10	10	introduction	Sep	3
				Using Pandas		3
				Pandas Data structure		3
				series data structure		3
				accessing a series object and its elements		3
				operations on series object		3
				series objects vs. ID data structures and 1D Numpy arrays		3
				dataframe data structure		4
				creating and displaying a data frame		4
				data frame attributes		4
				dataframe vs. series and 2D numpy arrays		4
				selecting or accessing data		4
				adding/ Modifying rows/ columns values in dataframes		4
				deleting/ Renaming columns/ rows		4
				more on dataframe indexing		4
				introduction	Oct	
				iterating over a dataframe		1

				binary operations in a dataframe		1
2	Python Pandas- II	25	34	descriptive statistics with Pandas	Nov	1
				some other Essential Functions and Functionality		1
				advanced Operations of dataframe		1
				Handling Missing Data		2
				Combining Data Frames		2
				Function Groupby( )		2
3	Plotting with PyPlot			introduction		2
				Using Pyplot of Matplotlib Library- Installing and Improving Mathplotlib		2
				working with Pyplot Methods		3
				Creating Line Charts and Scatter Charts		3
				Creating Bar and Pie Charts		3
				Customizing the Plot		3
				Creating Histograms with Pyplot		4
				Creating Frequency Polygons		4
				Creating Box Plots		4
				Plotting data from a dataframe		4
4	Importing/ Exporting Data Between CSV Files/ My SQL	21	28	introduction	Dec	1
				transferring data between .csv files and dataframes		2
				transferring data between dataframes and MySQL		3
				Exporting dataframes data as a table in MySQL database		4
				introduction		2
				Relational data Model		2
				MySQL - A RDBMS		2
				Accessing database in MySQL		2
				Creating Tables in MySQL		2

5	MySQL SQL Revision Tour	21	27	Inserting data in Tables	April	3
				Making Simple Select Queries		3
				Creating Tables with SQL Constraints		3
				Viewing a table structure		3
				inserting data into another tables		3
				modifying data in tables		4
				deleting data from tables		4
				altering tables		4
				dropping tables		4
6	MySQL Functions			introduction		4
				text/ string functions		4
				Numeric Functions		4
				Date/ Time Functions		4
7	Querying Using SQL	17	23	introduction	May	1
				Ordering Records in Result - Order By Clause		1
				Aggregate Function		1
				Types of SQL Functions		2
				Grouping Result- Group By		2
8	Joins and Set Operations	9	11	introduction	Jun	3
				Joining Tables		3
				Unrestricted and restricted join		3
				using table alias		4
				joining more than two tables		4
				equi – non equi joins		4
				Natural joins		4
				performing SET operation- Union, Minus, Intersect Operator		4
				introduction		1

9	Introduction to Compuer Networks	26	22	Types of Networks	july	2
				Network Topology- Point to point, star, ring, mesh, bus, tree, fully connected		3
				factors to consider for topolofy selection		4
				network devices- modem, hub, switch, repeater, bridge,		4
10	Intruduction to Internet and Web	23	31	introduction	august	1
				Internet		1
				WWW		1
				web server		1
				URL		1
				Website		2
				Web Page		2
				Web Browser		2
				Internet Applications		3
				Chat		3
				VoIP		3
11	Societal Impacts			introduction		3
				Digital Footprint		4
				Net and communication Etiquettes		4
				Etical Issues- Intellectual property rights, Plagiarism		4
				Open Source Philosophy		4
				Copyright and other license		4
				Cyber Crime		4
				Cyber Law and IT act		4
				E-waste management		4
				Health concerns with technology usage		4
				introduction		1

12	Data Protection	25	34	Threats to Data	Sep	1
				Computer virus		1
				spyware		1
				adware		1
				spamming		2
				PC Intrusion		2
				Evasdropping		2
				Phishing and Pharming		2
				Cookies		2
				data protection solutions		2
				Firewall - An important solution for Computer Security		2