

LESSON PLAN & WORK-DONE DIARY FOR AY:2025-26, EVEN SEMESTER

Course with Code: Introduction to Data Analytics using Python – BBKA403				Faculty: Prof. Prashant R Kaigaddi		Semester & Section: IV Sem		
Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
MODULE-1								
1		Overview to Syllabus	PPT	1				
2		Introduction to Data Analytics:	PPT	2				
3		Life Cycle, Discovery, Data Preparation,	PPT	3				
4		Model Planning, Model Building	PPT	4				
5		Communicate Results, Operationalize	PPT	5				
6		Data Analytics using Python:	PPT	6				
7		Python for Data Analysis, Python as Glue	PPT	7				
8		Solving the “Two-Language” Problem, Essential Python Libraries	PPT	8				
9		Installation and Setup, Integrated Development Environments (IDEs)	PPT	9				

MODULE-2

Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
10		Python Data Structures: Strings- Creating and Storing Strings	PPT					
11		Basic String Operations, Accessing Characters in String by Index Number	PPT					
12		String Slicing and Joining	PPT					
13		String Methods, Formatting Strings	PPT					
14		Lists-Creating Lists, Basic List Operations	PPT					
15		Indexing and Slicing in Lists	PPT					
16		Built-In Functions Used on Lists	PPT					
17		List Methods. Sets, Tuples and Dictionaries						

MODULE-3

Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
18		NumPy Basics: The NumPyndarray, Universal Functions	PPT					
19		Data Processing Using Arrays, File Input and Output with Arrays	PPT					
20		Linear Algebra, Random Number Generation.	PPT					
21		Pandas: Introduction to pandas Data Structures	PPT					
22		Essential Functionality, Summarizing and Computing Descriptive Statistics	PPT					
23		Handling Missing Data	PPT					
24		Hierarchical Indexing	PPT					

MODULE-4

Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
25		Data Loading, Storage, and File Formats	PPT					
26		Reading and Writing Data in Text Format	PPT					
27		Binary Data Formats	PPT					
28		Interacting with HTML and Web APIs	PPT					
29		Interacting with Databases	PPT					
30		Data Wrangling	PPT					
31		Combining and Merging Data Sets	PPT					
32		Reshaping and Pivoting	PPT					
33		Data Transformation	PPT					
34		String Manipulation						

MODULE-5

Class No.	Date planned (DD/MM)	Topics to be covered	TLP Planned	Class No.	Date of Conduction (DD/MM)	Topics Covered	TLP Executed	Remarks if any deviation
35		Plotting and Visualization: A Brief matplotlib	PPT					
36		API Primer, Figures and Subplots	PPT					
37		Plotting Functions in pandas, Plotting Maps	PPT					
38		Data Aggregation and Group Operations	PPT					
39		GroupBy Mechanics, Data Aggregation, Group-wise Operations and Transformations	PPT					
40		Pivot Tables and Cross-Tabulation	PPT					

	Activity	Planned	Actual	Remarks
1	Theory Classes	40		
2	Assignments/Quizzes/Activity/ Self-study	2/3		
3	Tutorials/ Extra classes			
4	Internal Assessments	3		
5	ICT based Teaching (% of usage in Curriculum)			
Planning			Execution	
Faculty Signature:			Faculty Signature:	
HoD Signature:			HoD Signature:	