S.No.	Experiment / Exercise Title	Proposed No. of Sessions

DEPARTMENT OF INFORMATION TECHNOLOGY
<u>TEACHING PLAN</u>

Course Code	Course Title	Semester	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester
20IT3S01	DATA ANALYSIS AND VISUALIZATION Lab	III	CSE-CS	3 Periods	2023-24	07-08-2023

COURSE OUTCOMES

1	How to present data using some of the data visualization libraries in Python, including Matplotlib, Seaborn and Folium
2	How to use basic visualization tools, including area plots, histograms, and bar charts
3	How to use specialized visualization tools, including pie charts, box plots, scatter plots and bubble plots
4	How to use advanced visualization tools, including waffle charts, word clouds and Seaborn and regression plots
5	How to create maps and visualize geospatial data.

Experiment Number	Experiment	Contact Hours
1	What is a Spreadsheet and explain its operations?	3
2	2. What are the 4 types of business analytics and explain it?	3
3	3. Explain the following Logical Functions. (a) IF (b) Nested IF (c) HLOOKUP (d) VLOOKUP	3
4	Explain some Statistical functions with examples? i. COUNT function ii. COUNT A function iii. COUNTIFS function	3
5	4. Create a table and apply Intermediate Statistical functions with examples. i. MEDIAN function ii. STANDARD DEVIATION function iii.QUARTILES function	3
6	Create a table with an example to represent Data Visualization by using MS Excel charts	3
7	Write a program for the Data Visualization using matplotlib in Python.	3

LAB SCHEDULE PLAN

S.No.	Experiment / Exercise Title	Proposed No. of Sessions
8	Write a program for some of the basic and specialized visualization tools in Python. i. PIE chart ii. Scatter plot	3
9	Explain the following advanced Visualization tools in Python. i. Waffle Charts ii. Seaborn	3
10	Explain the following advanced Visualization tools in Python. i. Word Clouds	3
11	Explain some techniques to Visualize Geospatial Data in Python.	3
12	Write about Choropleph maps with a Python program	3
	CUMULATIVE PROPOSED PERIODS	**36**

		Name	Signature with Date
i.	Faculty	Mrs. R. Uma Aruna Devi	
ii.	Module Coordinator	Mr. KSS Narayana	
iii.	Programme Coordinator	Dr. RVVSV Prasad	

Principal