



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.														
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End - Term Examinations –MAY 2025

Date: 26-05-2025

Time: 01:00 pm – 04:00 pm

School: SOIS	Program: BCA,BCI	
Course Code :CSA2018	Course Name: Data Modelling and Visualization	
Semester: IV	Max Marks: 100	Weightage: 50%

CO - Levels	C01	C02	C03	C04	
Marks	28	24	24	24	

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

10Q x 2M=20M

1.	Define Data in terms of Data Analysis	2 Marks	L1	C01
2.	Define Data Cleansing.	2 Marks	L1	C01
3.	Define R programming	2 Marks	L1	C02
4.	State Grouped charts	2 Marks	L2	C02
5.	Describe temporal data type	2 Marks	L2	C03
6.	Illustrate Parallel coordinate plots	2 Marks	L2	C03
7.	Describe Wordcloud in Text data visualization.	2 Marks	L2	C04
8.	Define Line Data	2 Marks	L1	C04
9.	Identify Data Frame in pandas	2 Marks	L1	C01
10.	Explain Flatten Function in python	2 Marks	L2	C01

Part B

Answer the Questions.

Total Marks 80M

11.	a.	Explain Data Abstraction? Outline Challenges and benefits of data abstraction	10 Marks	L2	CO1
	b.	Explain the difference between Data and Information with examples.	10 Marks	L2	CO1
Or					
12.	a.	Explain about Numpy library of python.	5 Marks	L2	CO1
	b.	Create a NumPy program to sort the student id with increasing height of the students from given students id and height. Print the integer indices that describes the sort order by multiple columns and the sorted data.	15 Marks	L5	CO1

13.	a.	Describe the Significance of Explorative Data Analysis with a neat diagram.	10 Marks	L2	CO2
	b.	Compare the advantages and disadvantages of Bayesian Data Analysis.	10 Marks	L2	CO2
Or					
14.	a.	Create a python script to upload the dataset Weather.csv without using pandas library. (10 marks) Discover Days of Rain and Average Wind speed from the dataset Weather.csv without using pandas library. (10 marks)	20Marks	L5	CO2

15.	a.	Explain the libraries used to analyze and visualize the time series data.	10 Marks	L2	CO3
	b.	Create a python script to Get total profit of all months and show line plot with the following Style properties Generated line plot must include following Style properties: – Line Style dotted and Line-color should be red Add a circle marker. Line marker color as read Line width should be 3 profit data provided for each month.	10 Marks	L5	CO3
Or					
16.	a.	Explain the Advantages and Dis advantages of Raster Data	10 Marks	L2	CO3

	b.	Explain Data Types in Date Time Module with reference to Time Series Data	10 Marks	L2	C03
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17.	a.	Illustrate in detail the Data Visualization Do's with reference to Data Science	10 Marks	L2	C04
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	b.	Create a Python program using Titanic Dataset from Seaborn library to create line plot and Scatter plot. Generate images from the line and scatter plots and make them available for download	10 Marks	L5	C04
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Or

18.	a.	<p>Analyze and Explain the Case Study 1: Cause of Deaths in the United States (1999–2015) .</p> <p>Find What were the causes of death in this dataset?</p> <p>Find Unique States in the Study?</p>	20 Marks	L5	C04
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