

Name. _____		<b>Printed Pages:01</b>		
Student Admn. No.: _____				
<b>School of Computing Science &amp; Engineering</b> <b>Backlog Examination, June 2023</b> <b>[Programmed:MCA] [Semester: MCA II Sem [Batch: ]</b>				
<b>Course Title: Data Visualization</b>		<b>Max Marks: 100</b>		
<b>Course Code: MCAE1211</b>		<b>Time: 3 Hrs.</b>		
<b>Instructions:</b>	1. All questions are compulsory. 2. Assume missing data suitably, if any.			
		K Level	COs	Marks
<b>SECTION-A (15 Marks)</b>		<b>5 Marks each</b>		
<b>1.</b>	Write short notes on the following : 1) Geoplots 2) Dot Map 3) Choropleth Map	K1	CO1	5
<b>2.</b>	Differentiate between Bar Plot and Column Plot.	K3	CO3	5
<b>3.</b>	Write a program for splitting and filtering the sample dataset.	K2	CO2	5
<b>SECTION-B (40 Marks)</b>		<b>10 Marks each</b>		
<b>4.</b>	Give a brief introduction to pandas. Explain some advantages of pandas over Numpy.	K2	CO2	10
<b>5.</b>	Explain pie chart. Create a Pie Chart for Water Usage with the help of Matplotlib.	K1	CO2	10
<b>6.</b>	Analyze the need of data wrangling with the help of suitable diagram.	K3	CO3	10
<b>7.</b>	Demonstrate the use of matplotlib in data visualization in detail.  OR Write short notes on the following: Scatter Plot, Bubble Plot, Correlogram	K4	CO4	10
<b>SECTION-C (45 Marks)</b>		<b>15 Marks each</b>		
<b>8.</b>	Demonstrate a program to compute the Mean, Median, Variance, and Standard Deviation of a Dataset using numpy.	K4	CO4	15
<b>9.</b>	Create a Bar Plot for Movie Comparison with the help of matplotlib. Also discuss the bar plot in detail.	K3	CO3	15
<b>10</b>	Explain some Temporal, Spatial and Comparison plots in detail.  OR Illustrate the Basic of Visualization process of data step by step.	K3	CO3	15