

Register No : _____

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

M.E DEGREE END SEMESTER THEORY EXAMINATIONS, NOV /DEC 2024

Third Semester

Computer Science and Engineering

CP4092 - Data Visualization Techniques

Regulations - 2021

Duration : 3 Hrs

Maximum: 100 Marks

PART - A (ANSWER ALL QUESTIONS) (Marks 10*2=20)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	Define data visualization and give any four examples?	RE	1	2
2.	How to explore the relationship between two variables?	UN	1	2
3.	List the eight visual variables in data visualization.	RE	2	2
4.	Identify the benefits of semiotics?	UN	2	2
5.	Compare GIS and geographical data.	UN	3	2
6.	Identify the important points of data visualization.	UN	3	2
7.	Outline the different levels of text representation in data visualization.	UN	4	2
8.	What is meant by vector space model?	RE	4	2
9.	List the problems in designing effective visualization.	RE	5	2
10.	How important are aesthetics in designing?	UN	5	2

PART - B (ANSWER ALL QUESTIONS) (Marks 5*13 = 65)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Illustrate the different types of data that are used in visualization.	UN	1	13
	Or			
	b i Explain in detail about Pseudo code convention.	UN	1	7
	ii Explain about data preprocessing and datasets.	UN	1	6
12.	a Explain in detail about Gibson's theory of perception.	UN	2	13
	Or			
	b Illustrate the different stages in data visualization.	UN	2	13
13.	a Analyze the different techniques used in data visualization.	AN	3	13
	Or			
	b Examine the visualization techniques for displaying hierarchical structure and displaying arbitrary graphs/networks.	AN	3	13

14.	a	How different types of text and documents are used in data visualization?	UN	4	13
		Or			
	b	Apply interaction control techniques in a real time example data visualization project.	AP	4	13
15.	a	Illustrate the different steps to get better data visualization.	UN	5	13
		Or			
	b	i Summarize the different hardware used in data visualization	UN	5	5
		ii Explain the application of data visualization in detail.	UN	5	8

*PART – C (Marks 1*15 = 15)*

<i>Q.No</i>		<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
16.	a	Examine the different issues of data, cognition, perception and reasoning, system design evaluation in designing effective visualization.	AN	5	15
		Or			
	b	Illustrate vector space model and how does it function in information retrieval and text analysis.	AP	4	15