

Reg.No.:



VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN  
[AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]  
Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

**Question Paper Code: 13003**

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – MAY / JUNE 2024

Eighth Semester

Computer Science and Technology

U19CTE19 – DATA VISUALIZATION

(Regulation 2019)

Time: Three Hours

Maximum: 100 Marks

Answer ALL the questions

Knowledge Levels (KL)	K1 – Remembering	K3 – Applying	K5 - Evaluating
		K2 – Understanding	K4 – Analyzing

PART – A

(10 x 2 = 20 Marks)

Q.No.	Questions	Marks	KL	CO
1.	What is experimental semiotics?	2	K3	CO1
2.	Write the advantages of data visualization.	2	K2	CO1
3.	Mention any 4 applications of fisheye view.	2	K2	CO2
4.	What is abstraction in computer graphic?	2	K3	CO2
5.	List out the 2D visualization techniques.	2	K4	CO3
6.	What is document visualization workspace?	2	K5	CO3
7.	Write the importance of figure captions.	2	K4	CO4
8.	What is the need for textual methods of abstraction?	2	K1	CO4
9.	Distinguish between spatial and non spatial data?	2	K2	CO5
10.	What is Tactile map?	2	K1	CO5

PART – B

(5 x 13 = 65 Marks)

Q.No.	Questions	Marks	KL	CO
11. a)	What are the 8 stages of visualizing data and explain them in detail.	13	K4	CO1

(OR)

	b)	What are the types of data and explain them with an example.	13	K3	CO1
12.	a)	Explain Fisheye Views for 3D data with an example.	13	K2	CO2
		(OR)			
	b)	Write down key factors to consider when comparing visualizations of information space and explain them in detail.	13	K4	CO2
13.	a)	What is data mapping? Explain the key components of data mapping in detail.	13	K2	CO3
		(OR)			
	b)	Brief any 4 visualization techniques used for trees and explain them with an example.	13	K3	CO3
14.	a)	How can you design an interface for interactive 3D illustrations with images and text? Explain with an example.	13	K2	CO4
		(OR)			
	b)	List and explain the interactive zoom techniques used for architectural illustration purposes.	13	K4	CO4
15.	a)	Explain the interactive medical illustrations in detail.	13	K2	CO5
		(OR)			
	b)	Explain synthetic holography in detail.	13	K4	CO5

PART – C

		(1 x 15 = 15 Marks)		
Q.No.	Questions	Marks	KL	CO
16.	a) Explain Zoom navigation in user interface in detail.	15	K2	CO5
	(OR)			
	b) Explain in detail about Tactile maps for the blind people.	15	K3	CO5