

Reg.No.:

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

Question Paper Code: 130001

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – NOV. / DEC. 2024

Eighth Semester

Computer Science and Technology
U19CTV34 – 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	K6 - Creating

PART – A

(10 x 2 = 20 Marks)

Q.No.	Questions	Marks	KL	CO
1.	Explain visualization with an example.	2	K1	CO1
2.	List out any two benefits of visualization.	2	K1	CO1
3.	What is abstraction in user interface?	2	K1	CO2
4.	With a suitable example, explain non-computer visualization.	2	K2	CO2
5.	Define contour plot and mention its application.	2	K2	CO3
6.	What is multi-dimensional data, explain with suitable example.	2	K2	CO3
7.	Explain captions in visual interfaces with an example.	2	K2	CO4
8.	With suitable example, explain textual labels in images.	2	K2	CO4
9.	How to render gestural expression, give an application for it.	2	K2	CO5
10.	Explain non-spatial data with appropriate example.	2	K2	CO5

PART – B

(5 x 13 = 65 Marks)

Q.No.	Questions	Marks	KL	CO
11. a)	Explain in detail about a model of perceptual processing.	13	K2	CO1
	(OR)			
b)	Discuss about the experimental Semiotics based on Perception.	13	K2	CO1
12. a)	Explain in detail about Fisheye Views and its applications.	13	K2	CO2
	(OR)			
b)	Discuss about non-linear magnification and its application.	13	K2	CO2
13. a)	What is 3-D visualization techniques, explain any one in detail.	13	K2	CO3
	(OR)			
b)	Explain the significance of Data Mapping and the steps involved in it.	13	K2	CO3
14. a)	Discuss in detail about various zoom techniques for illustration purpose.	13	K3	CO4
	(OR)			
b)	Discuss about the architecture for building the textual labels from the images.	13	K3	CO4
15. a)	Explain in detail about Synthetic holography along with a suitable application.	13	K3	CO5
	(OR)			
b)	What is interactive medical illustration and how is it rendered, explain with a suitable example.	13	K4	CO5

PART – C

(1 x 15 = 15 Marks)

Q.No.	Questions	Marks	KL	CO
16. a)	Explain the process of generating pure text from graphics with an example.	15	K2	CO4
	(OR)			
b)	Explain in detail about developing tactile maps for the students with visual impairments.	15	K3	CO5