



## B.Tech IV Semester Regular Examinations, July 2022

### DATA VISUALIZATION (CSE (DS))

**Maximum Marks: 70**

Date:30.07.2022 Duration: 3 hours

#### PART A

All the following questions carry equal marks

(10x2M=20 Marks)

1. What is Visualization?
2. What is Scatter Plot?
3. Distinguish Between Visualization of Line Data and Visualization of Area Data.
4. What is Dynamic Data?
5. Differentiate between Point-Based Techniques and Line-Based Techniques.
6. Define Arbitrary Graphs.
7. What are the Levels of Text Representation?
8. What is Unified Framework?
9. What are the Steps involved in Designing Visualizations?
10. List Modern Integrated Visualization Systems.

#### PART B

Answer All the following questions.

(10MX 5=50Marks)

11. Briefly explain the Data Foundations? [10]  
OR
12. A. What is the Relationship of visualization with other fields?  
B. What are different types of data explain in detail. [5+5]
13. A. Write Short Notes on One-Dimensional Data, Two-Dimensional Data, and Three Dimensional Data Techniques.  
B. Explain 8 visual variables. [5+5]  
OR
14. A. Briefly explain the Visualization Techniques for Geospatial Data.  
B. Explain Dashboard with example. [5+5]
15. A. Explain the Techniques for Trees briefly?  
B. What is Region-Based Techniques? [5+5]  
OR
16. A. Write short notes on Arbitrary Graphs.  
B. What is Hierarchical Structures? [5+5]
17. A. What is Vector Space Model?  
B. What is Interaction Operands and Spaces? [5+5]  
OR
18. A. Write short notes on Object Space and Data Space.  
B. Explain the Document Collection Visualizations. [5+5]

19. A. Compare and Evaluate the Visualization Techniques.  
B. What is Modern Integrated Visualization Systems? [5+5]

OR

20. A. What is the Problems in Designing Effective Visualizations?  
B. Define the terms legend, interval, axes, and scales in a chart.