



R22 Regulation

Subject code:406FA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VI Semester Supplementary Examinations, November 2025

DATA VISUALIZATION

(IT)

Maximum Marks: 60

Date:15.11.2025

Duration: 3 hours

- Note: 1.This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X1M=10 Marks)		Marks	CO	Bloom Tx
1.a)	What are the key steps in the Visualization process?	1M	1	1
b)	How do data sets contribute to Data Analysis?	1M	1	2
c)	Define Perception with example.	1M	2	1
d)	Write about Taxonomy of Visualization.	1M	2	2
e)	Write on Probing in Two-Dimensional Data concept.	1M	3	2
f)	Brief on Andrews Curves.	1M	3	1
g)	What is Interaction for Data Visualization?	1M	4	3
h)	List some of the types of visualization in a single text document.	1M	4	2
i)	Write some examples on Visualization Systems.	1M	5	2
j)	Give some User Tasks for evaluating Visualization Techniques.	1M	5	3

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	Bloom Tx
2	What is Pseudo Code? How are scatter plots useful in data analysis?	10M	1	2
OR				
3	Explain the concept of Data Preprocessing and describe its key steps with examples to elaborate the importance in Data Visualization.	10M	1	3
4	Explain about the various stages in Visualization with neat diagram.	10M	2	3
OR				
5	Write about any two different Visualization Techniques for Geospatial Data.	10M	2	3
6	Write a short note on Visualization Techniques for Trees and Graphs	10M	3	2
OR				
7	Describe the features of Displaying Arbitrary Graphs/Networks.	10M	3	4

8	Explain the concept of the Vector Space Model and discuss its applications in text and document visualization, including its role in information retrieval and text similarity analysis.	10M	4	3
	OR			
9	Elaborate on Object Space, Data Space, Attribute Space, Data Structure Space, Visualization Structure Space.	10M	4	4
10	Illustrate Issues of Data during designing effective Visualizations?	10M	5	4
	OR			
11	Explain the Structures for Evaluating Visualizations with examples.	10M	5	3