

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) EXAMINATION – SUMMER 2024

Subject Code:3160717

Date:20-05-2024

Subject Name:Data Visualization

Time:10:30 AM TO 01:00 PM

Total Marks:70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

	MARKS
Q.1 (a) What is Data visualization? How it is used in real time world?	03
(b) What are the keys factors for Data visualization? Explain in short.	04
(c) What is Google API? Explain how it can be used in data visualization? Explain it with examples.	07
Q.2 (a) Differentiate: (1) Canvas Vs SVG (2) JSON Vs XML	03
(b) Write down a code for reading and displaying .txt file.	04
(c) How do you assure maximum readability? Explain it with example.	07
OR	
(c) What is DOM? Write a code to read student XML file and display on the browser.	07
Q.3 (a) What is Bar chart? Explain it in short.	03
(b) Explain Bubble Chart in short.	04
(c) What is Semantic table? Explain it with suitable example	07
OR	
Q.3 (a) What is Pie chart? Explain it in short.	03
(b) Write down a code for reading and displaying JSON file.	04
(c) Write down code to display Line chart and Area chart. Explain it.	07
Q.4 (a) Write a short note: D3.js	03
(b) Explain Data join of D3.js with suitable example.	04
(c) Explain Various Functions of D3.js with example code.	07
OR	
Q.4 (a) Write a short note: XML	03
(b) What is an Asynchronous request? How do you deal with it.	04
(c) Write a code snippet to demonstrate animation on the page.	07
Q.5 (a) What is Spark line? Explain in short.	03
(b) What is an interactive button? Explain with example.	04
(c) Draw an information dashboard of any hypothetical University.	07
OR	
Q.5 (a) What is Information dashboard?	03
(b) What are advantages of Graphics library?	04
(c) Explain all issues related in designing Dashboard in detail.	07
