GUJARAT TECHNOLOGICAL UNIVERSITY
BE- SEMESTER–VI (NEW) EXAMINATION – WINTER 2024

Subject Code:3160717   **Date:28-11-2024**
Subject Name:Data Visualization
Time:02:30 PM TO 05:00 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 Infographics explain with example	**03**
	(b)	Describe Simultaneous acquisition and visualization.	**04**
	(c)	What is charting Primitives? List all types of Charts and explain bar Chart and line Chart.	**07**
Q.2	**(a)**	Explain linear gradient and radial gradient in canvas.	**03**
	(b)	Why is HTML5 so important to data visualization?	**04**
	(c)	How to use the HTML5 canvas to render dynamic column charts?	**07**
		OR	
	(c)	How to use the Google Charts API to render a column chart for University result data of various subjects.	**07**
Q.3	**(a)**	How to read XML file? Explain with example.	**03**
	(b)	Explain CSS-style selectors with example.	**04**
	(c)	How to use the Google Charts API to render a Pie chart for Election data of various states.	**07**
		OR	
Q.3	**(a)**	How to read JSON file? Explain with example.	**03**
	(b)	How the HTML5 canvas differs from SVG graphics	**04**
	(c)	Explain Data points and XY chart with example	**07**
Q.4	**(a)**	Explain transaction with respect to data visualization	**03**
	(b)	Explain select and append command in D3.js with example	**04**
	(c)	Write a code to demonstrate play button also explain it.	**07**
		OR	
Q.4	**(a)**	Prepare column chart using the HTML5 canvas.	**03**
	(b)	Explain Select all and exit command in D3.js with example.	**04**
	(c)	Describe Loading and Filtering External Data in data visualization	**07**
Q.5	**(a)**	How do you update charts?	**03**
	(b)	How to add Play button to the page? Explain with example	**04**
	(c)	What are the key Factors of Data Visualization?	**07**
		OR	
Q.5	**(a)**	Explain syntax of polygon and poly points in canvas with example.	**03**
	(b)	How you achieve eloquence? Explain it	**04**
	(c)	What is information Dashboard? Explain various design issues of it	**07**

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