

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VI (NEW) EXAMINATION – SUMMER 2022****Subject Code:3160717****Date:06/06/2022****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.

- Q.1** (a) Define following Term : Visualization, Filtering, Axes **03**  
(b) Differentiate following: **04**  
1) Canvas and SVG  
2) Linear Scale and Ordinal Scale  
(c) How to work with Google API? Give an example of pie chart in Google API **07**
- Q.2** (a) What is XSLT? Explain with example. **03**  
(b) Write a code to read CSV file and display its content on the browser **04**  
(c) Define Document Object Model (DOM). Write a code to Read a XML file and display its content on the browser. **07**
- OR**
- (c) Define DTD, Explain XML syntax with example. **07**
- Q.3** (a) Define Data binding. What is the use of text( ). **03**  
(b) What is the Transaction? How to apply Transaction? **04**  
(c) Explain bar chart, pie chart, line chart, bubble chart with example. **07**
- OR**
- Q.3** (a) Differentiate between .xml file and .csv file **03**  
(b) How to read JSON file? Explain with example. **04**  
(c) Explain Data points and XY chart with example **07**
- Q.4** (a) How to use selection in D3.js? **03**  
(b) Explain select and append command in D3.js with example **04**  
(c) Explain data-joins in D3.js with example. **07**
- OR**
- Q.4** (a) Describe the changing method of D3.js with example. **03**  
(b) Explain Select all and exit command in D3.js with example. **04**  
(c) Explain Various Functions in D3.js **07**
- Q.5** (a) Explain syntax of polygon and poly points in canvas with example. **03**  
(b) How to make interactive button? Explain with example. **04**  
(c) Explain Dashboard with example. **07**
- OR**
- Q.5** (a) Differentiate between Linear Scale and Ordinal Scale. **03**  
(b) How to add Play button to the page? Explain with example. **04**  
(c) What are the key Factors of Data Visualization? **07**

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