

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA– SEMESTER –V EXAMINATION –SUMMER-2019**

**Subject Code:3650015****Date: 10-05-2019****Subject Name: Data Visualization****Time:10.30 am to 1.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What is Data Visualization? Explain how data is visualized. **07**  
 (b) What is HTML5? Why is HTML5 so important to data visualization? **07**
- Q.2** (a) Explain the Basic Building Blocks for Data Visualization. **07**  
 (b) Write the difference for the following: **07**  
 i) Pie Chart and Donut Chart  
 ii) Bar Chart and Histogram
- OR**
- (b) Explain the difference between <canvas> tag and SVG **07**
- Q.3** (a) What is XSLT? How to perform styling with XSLT **07**  
 (b) What is Google API? How to use the Google chart API to animate a bar chart. **07**
- OR**
- Q.3** (a) What is Linear Interpolation? Where to use Interpolation in chart. **07**  
 (b) What is Script? How it is applied using css. What are the benefits? **07**
- Q.4** (a) How many methods are there for creating Selection and explain them with example. **07**  
 (b) What is Anonymous Function? Why and when Anonymous Functions are used. **07**
- OR**
- Q.4** (a) Write a snippet to add “Best of Luck” on a green circle with red color arial font size 20 in D3.js. **07**  
 (b) List and describe any seven Axis components. **07**
- Q.5** (a) Enlist few data formats and their corresponding functions that can be used with D3. Does D3 support .xls and .xlsx. **07**  
 (b) How to add transitions to the buttons **07**  
 Write a snippet to create a interactive button using data join in D3.js
- OR**
- Q.5** (a) What is Binding? Why Binding of data is necessary. **07**  
 (b) Explain Filters in D3.js **07**

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