

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA - SEMESTER– V EXAMINATION – WINTER 2019****Subject Code: 3650015****Date: 19/11/2019****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.

- Q.1 (A)** Attempt following. **07**
1. What is Data Visualization?
 2. XSLT stands for _____.
 3. Explain what is SVG?
 4. Explain what is d3.js?
 5. How D3.js identify on which elements to operate?
 6. JQuery provides data-driven functionality of D3. True / False?
 7. _____ is SVG group element tag?
- (B)** Differentiate between following.
1. D3.js and jQuery **03**
 2. SVG and Canvas **04**
- Q.2 (A)** What is HTML5? Explain the new key feature of HTML5. **07**
- (B)** How many types of Charts? Explain any two of them in Details. **07**
- OR**
- (B)** Attempt following.
1. Write a snippet to obtain a red circle with radius 5 and stroke black. **04**
 2. How attr() are used to apply classes and style rules. **03**
- Q.3 (A)** What is Script? How it is applied using CSS? What are the benefits? **07**
- (B)** What is XSLT? How to open styling with XSL? **07**
- OR**
- Q.3 (A)** Which are two effective tools for drawing graphics in the browser? Explain advantage and disadvantage of any one of them. **07**
- (B)** What is D3.js axis component? Why axis is added to the graph? What information does the scale of axis tell? **07**
- Q.4 (A)** What is D3.js? Explain .selection, .selectAll and .data() in brief. **07**
- (B)** What is Google API? How to use the Google chart API to animate a bar chart. **07**
- OR**
- Q.4 (A)** What are transitions? How they work? How they can be chained together? **07**
- (B)** What is selection? Explain enter selection, update selection and exit selection. **07**
- Q.5 (A)** What is use of DOM and SVG in D3? **07**
- (B)** Write a code for adding play button and allow user to interrupt the play sequences. **07**
- OR**
- Q.5 (A)** What is Data Binding? Explain important of update, enter, and exit function. **07**
- (B)** How to read data from standard text file. Explain with Example **07**
