

END SEMESTER EXAMINATION – MARCH 2025**SEMESTER 8: INTEGRATED M. Sc. PROGRAMME IN COMPUTER SCIENCE – DATA SCIENCE****COURSE : 21UP8CRMCP26 : DATA VISUALIZATION***(For Regular 2021 Admission)*

Time: Three Hours

Max. Weightage: 30

PART A**Answer any 8**

1. Differentiate between conformal projection and equal area projection. (U)
2. Draw a Keeling curve. (R)
3. Expand the D's in d3. (R)
4. Differentiate between delay() and duration() in D3. (U)
5. Mention the properties that are available for zooming data in C3. (R)
6. Give the properties to set the visibility and position of legends in a chart. (U)
7. List the advantages of tableau. (An)
8. State the significance of Show me tab in tableau. (An)
9. Define a dashboard. (U)
10. Give the syntax of adding a rectangle using svg element tag. (A)

(1 x 8 = 8 Weight)**PART B****Answer any 6**

11. Describe a slope graph with suitable diagrams. (U)
12. Explain the two methods for detrending time series data. (An)
13. Write short notes on time scaling functions with sample code. (Cr)
14. Write a program to explain how to load a csv file in D3 and also handle errors while loading. (Cr)
15. Write a program to draw a pie chart using C3. (Cr)
16. Write a program that shows loading a bar chart with two data series and transforms into area chart and area spline charts in succession using C3. (Cr)
17. Discuss the major components of sheet view in tableau. (R)
18. Explain the steps involved in creating a dashboard. (U)

(2 x 6 = 12 Weight)

PART C

Answer any 2

19. Explain visualizing distributions. (An)
20. Write a program that uses html div element tooltips in a bar chart with D3 library. (Cr)
21. Write a program that plots a scatterplot with axis using D3. (Cr)
22. Write a program to load/unload data as flowing in C3. (Cr)

(5 x 2 = 10 Weight)