



QP CODE: 26019600



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION MARCH 2026

Fourth Semester

MSc Statistics with Data Science

ELECTIVE - ST880402 - DATA VISUALIZATION

2020 Admission Onwards

0E6F28EB

Time: 3 Hours

Weightage: 30

(Answer any **THREE** questions. Each question carries a weight of **10**)

1. Elaborate cognitive load and clutter. Explain Gestalt's principles of visual perception with examples.
2. Illustrate the usage of Bar chart, Scatterplot, Area chart, Heat map and histogram in data visualization.
3. Call **mtcars** data.
 - (a) Draw a scatter plot whose x axis and y axis should be mpg and disp.
 - (b) Write appropriate title to the plot.
 - (c) Give label to x axis and y axis.Use ggplot2.
4. Use **Movie Ratings** data.
 - (1) Plot a histogram with respect to
 - (a) Critical ratings,
 - (b) Audience ratings,
 - (c) Budget,
 - (d) Highlight Genre of movies in each histogram.
 - (2) Give appropriate title, axis title and legends to each plot.
 - (3) Apply the facet in each plot.Use ggplot2.
5.
 - (1) Draw pie chart using **mtcars** data. Use plotly •
 - (a) Use the variable cut
 - (b) Use the variable color
 - (c) Use the variable clarity
 - (2) Draw these entire figures as a subplot and give appropriate title to the plot.
6.
 - (1) Use the **World_GDP** data to plot the world map
 - (2) Give appropriate title to the plot and colorbar.Use plotly.

