B.E / B.Tech. PRACTICAL END SEMESTER EXAMINATIONS, NOVEMBER/DECEMBER 2022

Third Semester

AD3301 - DATA EXPLORATION AND VISUALIZATION

(Regulations 2021)

Time : 3 Hours Answer any one Question Max. Marks 100

Aim/Principle/Apparatus required/Procedure	Tabulation/Circuit/ Program/Drawing	Calculation & Results	Viva-Voce	Record	Total
20	30	30	10	10	100

1. Install the data Analysis and Visualization tool: Python

2. Perform exploratory data analysis (EDA) on with datasets like email data set.

3. Working with Numpy arrays, Pandas data frames, Basic plots using Matplotlib.

4. Perform Time Series Analysis and apply the various visualization techniques.

5. Explore various variable and row filters in R for cleaning data.

6. Build cartographic visualization for multiple datasets involving various countries of the world; states and districts in India.

7. Perform basic plots in Matplotlib using own dataset.

8. Use a case study on a data set and apply the various EDA and visualization techniques and present an analysis report.

9. i)Implement Matplotlib line plot using numpy array function

   ii)Implement Matplotlib scatterplot using numpy array function

10. Install the data Analysis and Visualization tool: Power BI.

11. Perform visual aids for exploratory data analysis (EDA) with our own datasets.

12. Export all your emails as a dataset, import them inside a pandas data frame, visualize them and get different insights from the data.

13. Perform exploratory data analysis (EDA) on COVID-19 data Set.

14. Install the data Analysis and Visualization tool : R

15. Perform Data Analysis and representation on a Map using various Map data sets.

16. Perform multiple plots with seaborn with default dataset (iris dataset).

17. Apply various plot features in R on sample data sets and visualize.

18. Install the data Analysis and Visualization tool: Tableau Public.

19. i)Perform Matplotlib multiple lines using numpy array function.

    ii)Perform Matplotlib 3D plots using numpy array function.

20. Perform exploratory data analysis (EDA) on Wine Quality Data Set.