

Online PGDM

Second Year, Trimester V, Sep 2024

Course Name: Machine Learning Max Marks: 70

Course Code: 5114

INSTRUCTIONS:

a. Attempt all the questions on a single Jupyter Notebook

- b. Write down your Roll no., course name on top of Jupyter Notebook
- c. Save your Jupyter notebook with .ipynb extension and as pdf file.
- d. Label the files as ML_roll no (for example: PBA_23)

Predicting CO₂ Emissions

The dataset CO2.csv contains data about carbon emissions of different vehicles. It also contains different features of the vehicles. The description of the variables is given in the file data description.csv.

Analyze the data using python and perform the following tasks:

- 1. Perform exploratory Data analysis (EDA). Discuss and interpret the results you obtained in EDA.
- 2. Apply multiple regression analysis. Determine the significant predictors of CO2 emissions.
- 3. Validate the regression results.

Interpretation of all the outputs should be written by putting comments on the Jupyter notebook.