

Machine Learning and Data Analytics Frameworks Lab	L	P	C
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Discipline(s) / EAE / OAE	Semester	Group	Sub-group	Paper Code
EAE	7	MLDA-EAE	MLDA-EAE-5B	ML-469P

<p>Marking Scheme:</p> <ol style="list-style-type: none"> Teachers Continuous Evaluation: 40 marks Term end Theory Examinations: 60 marks <p>Instructions:</p> <ol style="list-style-type: none"> The course objectives and course outcomes are identical to that of (Machine Learning and Data Analytics Frameworks) as this is the practical component of the corresponding theory paper. The practical list shall be notified by the teacher in the first week of the class commencement under intimation to the office of the Head of Department / Institution in which the paper is being offered from the list of practicals below. Atleast 10 experiments must be performed by the students, they may be asked to do more. Atleast 5 experiments must be from the given list.
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1. R AS CALCULATOR APPLICATION

- Using with and without R objects on console
- Using mathematical functions on console
- Write an R script, to create R objects for calculator application and save in a specified location in disk.

2. DESCRIPTIVE STATISTICS IN R

- Write an R script to find basic descriptive statistics using summary, str, quartile function on mtcars& cars datasets.
- Write an R script to find subset of dataset by using subset (), aggregate () functions on iris dataset.

3. READING AND WRITING DIFFERENT TYPES OF DATASETS

- Reading different types of data sets (.txt, .csv) from Web and disk and writing in file in specific disk location.
- Reading Excel data sheet in R.
- Reading XML dataset in R.

4. VISUALIZATIONS

- Find the data distributions using box and scatter plot.
- Find the outliers using plot.
- Plot the histogram, bar chart and pie chart on sample data.

5. CORRELATION AND COVARIANCE

- Find the correlation matrix.
- Plot the correlation plot on dataset and visualize giving an overview of relationships among data on iris data.
- Analysis of covariance: variance (ANOVA), if data have categorical variables on iris data

6. REGRESSION MODEL

Import a data from web storage. Name the dataset and now do Logistic Regression to find out relation between variables that are affecting the admission of a student in an institute based on his or her GRE score, GPA obtained and rank of the student. Also check the model is fit or not. Require (foreign), require (MASS).