## ML Exam Question (Time: Max 1.5 hrs)

(Write a single program for the following tasks)

Identify a dataset suitable for classification, having minimum 3 features and a target column. (The dataset should not be from sklearn. Do not use already downloaded datasets from your folder. While evaluation you need to show the evaluator the site from where you have downloaded the data)

Develop a machine learning model using any one ML algorithm to do classification on the above dataset and print Accuracy Score, Confusion Matrix, and Classification Report.

Analyse the effect of

- a) varying the number of samples &
- b) varying the number of features (columns)

in the performance accuracy.

Visualize the above results of a) & b) using suitable graph.

## **Marks distribution**

1	Proper Dataset identification by yourself	10
2	Machine Learning Model Development and	10
	printing of metrics	
3	Analyze the effect of varying number of	10
	samples and number of columns, on the	
	performance metrics	
4	Visualization of the above	10