

Project Development Phase
Model Performance Test

Date	22 February 2026
Team ID	LTVIP2026TMIDS41603
Project Name	Exploratory analysis of rain fall data in India for agriculture
Maximum Marks	10 Marks

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.N o.	Param eter	Values	Screenshot
1	Metric s	Regression Model: MAE = 0.32 MSE = 0.21 RMSE = 0.46 R ² Score = 0.81 Classification Model: Confusion Matrix = [[21220 857 61] [3598 2639 75] [358 74 310]] Accuracy Score = 0.83 Classification Report = Precision = 0.81 Recall = 0.83 F1-Score = 0.81	[[21220 857 61] [3598 2639 75] [258 74 310]] Accuracy: 0.8307782208167194 Precesion: 0.8196736660656065 Recall: 0.8307782208167194 F1-score: 0.8124789140764411
2	Tune the Model	Hyperparameter Tuning: Grid Search was used to optimize model parameters such as number of trees and maximum depth. Validation Method: KFold Cross Validation (k = 5)	