**Project Development Phase**

**Model Performance Test**

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID35938 |
| Project Name | Revolutionizing Liver Care : Predicting Liver Cirrhosis using Advanced Machine Learning Techniques |
| Maximum Marks | 10 Marks |

**Model Performance Testing:**

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

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| **S.No.** | **Parameter** | **Values** | **Screenshot** |
|  | Metrics – Classification Model  Confusion Matrix  Accuracy Score  Classification Report | [[78, 4], [6, 32]]Confusion Matrix - , Accuray Score-  0.92  **Precision:** 0.93 **Recall:** 0.89 **F1-Score:** 0.91 |  |
|  | Tune the Model  Hyperparameter Tuning  Validation Method | GridSearchCV used to tune: max\_depth, learning\_rate, n\_estimators (XGBoost Classifier)  Stratified K-Fold Cross Validation (5-fold) to maintain class balance during training |  |