

Project Development Phase

Model Performance Test

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| Date | 20 January 2026 |
| Team ID | LTVIP2026TMIDS76912 |
| Project Name | HematoVision: Advanced Blood Cell Classification Using Transfer Learning |
| Maximum Marks | |

Model Performance Testing – HematoVision

| S.No. | Parameter | Values |
|-------|-----------------------|--|
| 1 | Metrics | Regression Model: Not Applicable (Project is Classification-Based) Classification Model: Confusion Matrix – Generated for 4 classes Accuracy Score – 98% Precision – 97–98% Recall – 97–98% F1-Score – 97–98% Classification Report – Generated using sklearn metrics |
| 2 | Tune the Model | Hyperparameter Tuning: Learning Rate Adjustment (e.g., 0.001 → 0.0001) Batch Size Optimization (16 / 32) Dropout Regularization (0.5) Fine-tuning last convolution layers Validation Method: Train-Test Split (80:20) Validation Split during training (10–20%) Early Stopping used to prevent overfitting |