

**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     | Model Summary                | Transfer Learning using VGG16 (pre-trained on ImageNet)<br>Input Shape: 224x224x3<br>Output Classes: 4 (Eosinophils, Lymphocytes, Monocytes, Neutrophils)<br>Total Parameters: ~15 Million<br>Trainable Parameters: Custom Dense Layers + Fine-tuned Layers<br>Optimizer: Adam<br>Loss Function: Categorical Crossentropy |
| 2     | Accuracy                     | Training Accuracy – 98%<br>Validation Accuracy – 97%<br>Training Loss – Low and stable<br>Minimal overfitting observed  |
| 3     | Fine Tuning Result (if done) | After unfreezing last few convolution layers:<br>Validation Accuracy improved from 95% to 97–98%<br>Better class-level precision and recall observed  |