**Functional & Performance Testing Template**

**Model Performance Test**

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| Date | 24 June 2025 |
| Team ID | LTVIP2025TMID35493 |
| Project Name | TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning |
| Maximum Marks |  |

**Test Scenarios & Results**

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| **Test Case ID** | **Scenario (What to test)** | **Test Steps (How to test)** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **FT-01** | User Registration Input Validation | Enter valid and invalid email/password in input fields | Valid entries accepted; invalid entries trigger error | Working as expected | Pass |
| **FT-02** | Location & Coordinates Input Validation | Input valid and invalid coordinates | Valid coordinates accepted, invalid ones throw an alert | Alerts triggered properly | Pass |
| **FT-03** | Route Suggestion System | Input source & destination and generate route | Optimized route is generated based on real-time traffic | Route suggested accurately | Pass |
| **FT-04** | API Connection to Traffic Data Source | Check if traffic data API returns response | Real-time data fetched from external API successfully | Working as expected | Pass |
| **PT-01** | Route Response Time Test | Measure time taken to fetch and display route suggestion | Response time should be under 3 seconds | Avg. 2.4 seconds | Pass |
| **PT-02** | Concurrent API Requests Test | Send multiple simultaneous route requests | API should handle multiple calls without lag | No slowdown observed | Pass |
| **PT-03** | File Upload Test for Incident Reports | Upload multiple image/PDF files for road incident reporting | Should upload and process without system crash | Upload handled successfully | Pass |