# Test Plan Document

## 1. Introduction

This Test Plan outlines the testing strategy, objectives, resources, schedule, and scope for the Loan Eligibility Prediction System.

## 2. Objective

The objective of testing is to validate the functionality, performance, and security of the system to ensure accurate loan eligibility results.

## 3. Scope of Testing

Includes functional testing of loan form, eligibility engine, admin dashboard, and API services.

## 4. Test Items

Loan Application Form, Eligibility Result Module, Admin View Module, API Endpoints.

## 5. Types of Testing

Manual Testing, Automation Testing using Selenium with Java, API Testing using Postman.

## 6. Test Strategy

Combination of white-box and black-box testing. Prioritize critical flows for automation and data-driven testing.

## 7. Test Environment

Windows 10, Chrome Browser (v114+), Java 11, Selenium WebDriver, TestNG, Maven, Postman.

## 8. Roles and Responsibilities

Manual Tester: Executes test cases manually. Automation Tester: Writes and runs Selenium scripts. Test Lead: Reviews plans and results.

## 9. Deliverables

Test Plan, Test Cases, Bug Reports, Test Summary Reports, Automation Scripts, Screenshots, API Collections.

## 10. Entry and Exit Criteria

Entry: Code ready, test environment setup. Exit: All critical test cases passed, major bugs fixed.

## 11. Risks and Mitigation

Delay in environment setup - Use backup system. Data inconsistency - Use mock test data.

## 12. Tools

Selenium, TestNG, Postman, Excel, JIRA, Git, Chrome Developer Tools.

## 13. Schedule

Testing will be conducted over a span of 2 weeks with daily status updates and a final report.