# Test Plan for Atul Airways Website

## 1. Project Overview

Atul Airways is launching a new website to enable users to:  
- Book flights  
- Schedule flights  
- Check flight status  
- Cancel bookings  
- Perform web check-in  
- View flight details  
- Search for flights  
  
The website will be developed using an Agile model. Both manual and automation testing will be performed. The targeted Go-Live timeline is 60 working days.

## 2. Objectives

- Ensure seamless user experience across all website features.  
- Validate all critical business functionalities: booking, cancellation, scheduling, and check-in.  
- Identify and eliminate bugs early using both manual and automated testing.  
- Maintain high quality and performance standards.

## 3. Testing Approach

Manual Testing:

- Exploratory Testing  
- Functional Testing  
- Regression Testing  
- UI/UX Testing  
- Cross-browser Testing  
- Mobile Responsive Testing

Automation Testing:

- Regression suites for critical flows (booking, check-in, cancellations).  
- Selenium WebDriver + TestNG framework will be used.  
- Automated smoke tests for major deployments.

Agile Testing Process:

- Testing will happen Sprint-wise.  
- Continuous collaboration with developers and stakeholders.  
- Test Cases and Automation Scripts will be updated sprint-by-sprint.

## 4. Scope of Testing

✅ Booking Flow (One-way, Round-trip, Multi-city)  
✅ Scheduling and Rescheduling of flights  
✅ Flight Status Check  
✅ Booking Cancellation  
✅ Web Check-in and Boarding Pass Generation  
✅ Flight Search  
✅ Flight Details Page  
✅ Payment Gateway Integration  
✅ Notifications (SMS/Email alerts)  
✅ User Account Management  
  
Out of Scope:  
- Third-party partner system deep testing (only integration points will be verified).

## 5. Test Deliverables

- Test Plan  
- Test Scenarios and Test Cases  
- Bug Reports  
- Daily/Weekly Status Reports  
- Sprint-wise Test Summary Reports  
- Automation Test Scripts and Execution Reports  
- Final Test Closure Report

## 6. Timeline

Project Duration: 60 Working Days  
Sprint Duration: 2 weeks per sprint  
Final UAT and Go-Live Preparation: Last 2 sprints

Phase | Duration  
------|---------  
Requirement Analysis | 3 days  
Test Planning & Environment Setup | 5 days  
Sprint 1 to N - Test Design, Execution & Automation | 8 weeks  
UAT & Final Regression | 1.5 weeks  
Go-Live | 60th working day

## 7. Test Environment

- Web Browsers: Chrome, Firefox, Safari, Edge  
- Devices: Desktop, Tablet, Mobile  
- Automation Tools: Selenium WebDriver, TestNG  
- Test Management: Jira, TestRail (if applicable)  
- Bug Tracking: Jira

## 8. Roles & Responsibilities

- QA Lead: Test Planning, Sprint Test Management, Client Reporting  
- Manual Testers: Test case execution, Bug reporting  
- Automation Testers: Automation Scripting, Regression Suite Maintenance  
- Developers: Bug fixing, Unit Testing

## 9. Risks & Mitigation

Risk | Mitigation Strategy  
---- | ---------------------  
Delay in requirement clarity | Regular sprint planning and backlog grooming  
Defect leakage due to Agile fast pace | Strong regression suite and smoke testing in place  
Third-party dependency delays | Early integration testing planning

## 10. Exit Criteria

- All critical and major bugs closed  
- Test cases executed with at least 95% pass rate  
- Final UAT sign-off from stakeholders