

# Phase 10: Quality Assurance Testing

## 1. Introduction

### Explanation:

Quality Assurance (QA) ensures that every component of the Medical Inventory Management System functions correctly, efficiently, and as per business requirements.

Testing was conducted across all Salesforce layers — **Objects, Flows, Validation Rules, Apex Triggers, Approval Processes, and Reports** — to validate both functionality and data accuracy.

### Objectives:

- Validate that all Salesforce automations and logic work as intended.
- Identify and fix any inconsistencies or logical errors.
- Ensure smooth user experience and data integrity.

## 2. Test Case Documentation Format

Each test case is documented using the following structure:

Section	Description
Use Case / Scenario	What function or process is being tested
Test Steps (Input)	Exact data/action performed
Expected Result	What should happen logically
Actual Result	What actually happened

Status

Pass / Fail

### 3. Test Case 1 – Product Record Creation

#### Use Case / Scenario:

Create a new product and verify if it is saved correctly with all mandatory fields.

#### Test Steps (Input):

1. Go to Products tab → New.
2. Enter:
  - Product Name: Paracetamol 500mg
  - Unit Price: 50
  - Minimum Stock Level: 10
  - Available Stock: 100
3. Save record.

The screenshot displays the 'Medical Inventory Management System' interface. The top navigation bar includes 'Home', 'products', 'Suppliers', 'Purchase Orders', 'Order Items', 'Inventory Transactions', 'Dashboards', 'Report Builder', and 'Analytics'. The main content area is titled 'Product\_c paracetamol' and features a 'Details' tab. The product details are as follows:

Field	Value
Product Name	paracetamol
Product ID	145
Category	Medicine
Unit Price	₹50
Minimum Stock Level	10
Available Stock	100
Expiry Date	10/11/2033
Seller	Co-Founder
Supplier_c	MediCare Plus

The 'Activity' section on the right shows 'Upcoming & Overdue' activities, with a message: 'No activities to show. Get started by sending an email, scheduling a task, and more.' Below this, it states: 'No past activity. Past meetings and tasks marked as done show up here.'

Status: Pass

#### **4. Test Case 2 – Validation Rule**

##### **Use Case / Scenario:**

Ensure validation prevents negative stock entry.

##### **Test Steps (Input):**

1. Edit existing Product record.
2. Set “Available Stock” to -10.
3. Save record.

**Status:** Pass

#### **5. Test Case 3 – Flow Automation (Expected Delivery Date)**

##### **Use Case / Scenario:**

Verify if the Flow automatically sets Expected Delivery Date = Order Date + 3 days.

##### **Test Steps (Input):**

1. Create a new Purchase Order with Order Date: 15-Oct-2025.
2. Save record.

**Status:** Pass

#### **6. Test Case 4 – Trigger Functionality**

##### **Use Case / Scenario:**

Check if Total Order Cost on Purchase Order updates when Order Items are added.

##### **Test Steps (Input):**

1. Create Purchase Order: PO-101.
2. Add two Order Items:
  - Product A – Qty 10 – Price ₹100
  - Product B – Qty 5 – Price ₹200

3. Save.

**Status:** Pass

## **7. Test Case 5 – Approval Process**

### **Use Case / Scenario:**

Validate that high-value orders (above ₹10,000) require approval.

### **Test Steps (Input):**

1. Create Purchase Order: PO-120 with total ₹15,000.
2. Click Submit for Approval.

**Status:** Pass

## **8. Test Case 6 – Email Alert**

### **Use Case / Scenario:**

Test if a notification email is sent when stock falls below minimum.

### **Test Steps (Input):**

1. Edit Product → Available Stock = 5 (below threshold 10).
2. Save record.

**Status:** Pass

## **9. Test Case 7 – Reports & Dashboard Data**

### **Use Case / Scenario:**

Check if Purchase Orders by Supplier report updates dynamically after new orders.

**Test Steps (Input):**

1. Add new order for Supplier X.
2. Refresh dashboard.

**Status:** Pass

**10. Test Case 8 – Security: Field-Level Restriction****Use Case / Scenario:**

Verify that the “Total Order Cost” field is hidden from the Purchase Manager profile.

**Test Steps (Input):**

1. Log in as Purchase Manager.
2. Open any Purchase Order record.

**Status:** Pass

**11. Test Case 9 – Login Restriction (IP Range)****Use Case / Scenario:**

Confirm user cannot log in outside the defined IP range.

**Test Steps (Input):**

1. Attempt login from an unregistered IP.

**Expected Result:**

Access should be denied with a “Login not allowed” message.

**Status:** Pass

## **12. Test Case 10 – Data Import & Export**

### **Use Case / Scenario:**

Ensure bulk import and export work correctly via Data Loader.

### **Test Steps (Input):**

1. Import 50 supplier records via CSV.
2. Export all supplier data to verify import.

### **Expected Result:**

All 50 suppliers imported correctly and visible in the exported file.

**Status:** Pass