TESTQUA31 – Laboratory Practical Assessment Answers

Task 1: What to Test (Functional Components)

1. Verify that the system accepts valid username and password.

2. Verify error message for invalid credentials.

3. Verify "All fields are required." for empty fields.

4. Verify password minimum length of 8 characters.

5. Verify account lock after 3 failed attempts.

Task 2: Functional Testing Process (3 Test Cases)

Test Case 1 – Valid Login

Identify Inputs: valid username + valid password

Expected Output: Successful login

Actual Output: Successful login

Comparison: PASS

Test Case 2 – Empty Fields

Inputs: username="", password=""

Expected Output: All fields are required.

Actual Output: All fields are required.

Comparison: PASS

Test Case 3 – Invalid Login

Inputs: wrong username/password

Expected Output: Invalid login credentials.

Actual Output: Invalid login credentials.

Comparison: PASS

Task 3: Detailed Functional Test Cases

TC01 – Valid Login

Steps: Enter valid credentials → Login

Data: valid_user / correct_password123

Expected: Redirect to dashboard

Actual: Successful login

Status: PASS

TC02 – Invalid Login

Steps: Enter wrong credentials

Expected: Invalid login credentials.

Actual: Error displayed

Status: PASS

TC03 – Empty Fields

Steps: Leave fields empty

Expected: All fields are required.

Actual: Message displayed

Status: PASS

TC04 – Short Password

Steps: Enter valid username + short password

Expected: Reject login

Actual: Password rejected

Status: PASS

TC05 – Account Lock

Steps: 3 failed attempts

Expected: Account locked message

Actual: Message shown

Status: PASS

Task 4: Testing Techniques

TC01 – System Testing

TC02 – System Testing

TC03 – Smoke/Sanity Testing

TC04 – System Testing

TC05 – System Testing

Task 5: Functional vs Non■Functional

Functional:

1. Valid login

2. Invalid login

3. Account lock check

Non■Functional:

1. Page load performance

2. Mobile responsiveness

3. Password security handling

Task 6: Benefits & Limitations

Benefits:

- Ensures correct system behavior

- Detects errors before deployment

- Confirms security and validation rules

Limitations:

- Cannot measure performance or load

- Only tests external behavior

- Depends on requirement completeness