

## **Manual Testing**

### ***Module 1: Software Testing Introduction***

- What is testing?***
- Importance of testing***
- Roles and Responsibilities***
- Principles of software testing***
- What is Quality?***
- How much testing is enough?***
- Differences between Manual and Automation Testing.***

### ***Module 2: Software Development Life Cycle***

#### ***1. SDLC Phases***

- Requirements Phase.***
- Analysis Phase.***
- Design phase.***
- Coding Phase.***
- Testing phase.***
- Delivery and Maintenance Phase.***

#### ***2. SDLC Models***

- Waterfall Model.***
- V Model***
- Agile Model.***
- Prototype Model.***
- Spiral Model.***

## ***Module 3: Software Testing Methodologies***

- White Box Testing.***
- Black Box Testing.***
- Grey Box Testing.***

## ***Module 4: Test Case Design Techniques***

### ***Static Techniques***

- Informal Reviews***
- Walkthroughs***
- Technical Reviews***
- Inspection***

### ***Dynamic Techniques***

### ***Structural Techniques***

- Statement Coverage Testing***
- Branch Coverage Testing***
- Path Coverage Testing***
- Conditional Coverage Testing***
- Loop Coverage Testing***

### ***Black Box Techniques***

- Boundary Value Analysis***

- Equivalence Class Partition***
- State Transition Technique***
- Cause Effective Graph***
- Decision Table***
- Use Case Testing***

## ***Experienced Based Techniques***

- Error guessing***
- Exploratory testing***

## ***Module 5: Levels of Testing***

### ***1. Functional Testing***

- Unit Testing***
- Integration Testing***
- System Testing***
- User Acceptance Testing.***
- Sanity/Smoke Testing.***
- Regression Test.***
- Retest.***

### ***2. Non Functional Testing***

- Performance Testing.***
- Memory Test***
- Scalability Testing.***
- Compatibility Testing.***
- Security Testing.***
- Cookies Testing.***
- Session Testing.***
- Recovery Testing.***

- Installation Testing.***
- Adhoc Testing.***
- Risk Based Testing.***
- I18N Testing.***
- L10N Testing.***
- Compliance Testing.***

## ***Module 6: Software Testing Life Cycle***

### ***1. Requirements Analysis/Design***

- Understand the requirements***
- Prepare Traceability Matrix***

### ***2. Test Planning***

- Object.***
- Scope of Testing.***
- Schedule.***
- Approach.***
- Roles & Responsibilities.***
- Assumptions.***
- Risks & Mitigations.***
- Entry & Exit Criteria.***
- Test Automation.***
- Deliverables.***

### ***3. Test Cases Design***

- Write Test cases***
- Review Test cases***
- Test Cases Template***

- ***Types of Test Cases***
- ***Difference between Test Scenarios and Test Cases.***

## ***4. Test Environment setup***

- ***Understand the SRS***
- ***Hardware and software requirements***
- ***Test Data***

## ***5. Test Execution***

- ***Execute test cases***
- ***Defect Tracking and Reporting***
  - ***Types of Bugs.***
  - ***Identifying the Bugs.***
  - ***Bug/Defect Life Cycle.***
  - ***Reporting the Bugs.***
  - ***Severity and priority***

## ***6. Test Closure***

- ***Criteria for test closure***
- ***Test summary report***

## ***7. Test Metrics***

- ***What is Test Measurements?***
- ***Why Test Metrics?***
- ***Metric Life Cycle.***
- ***Types of Manual Test Metrics.***

## ***Module 7: QA & QC & Testing***

- ***What is Quality Assurance?***
- ***What is Quality Control?***
- ***Differences of QA & QC & Testing***

### ***Test Management with TFS Tool (Learn & Implement)***

### ***Defect Tracking Tools (Learn & Implement)***

- ***TFS***