

1 REQUIREMENT ANALYSIS

- Analyze business functionality to understand business modules and module-specific functionalities
- Identify all transactions in the modules
- Identify all user profiles
- Gather user interface/authentication and geographic spread requirements
- Identify types of tests to be performed
- Gather details about testing priorities and focus
- Prepare Requirement Traceability Matrix (RTM)
- Identify test environment details
- Analyze feasibility of automation (if applicable)

2 TEST PLANNING

- Analyze available testing approaches
- Decide on best approach
- Prepare test plan/strategy document for different test types
- Select test tools
- Estimate test effort
- Plan resources and determine roles and responsibilities

3 TEST CASE DEVELOPMENT

- Create test cases, test design and automation scripts (if applicable)
- Review test cases and scripts
- Create test data

4 TEST ENVIRONMENT SETUP

- Understand required architecture and environment setup
- Prepare hardware and software development requirement list
- Finalize connectivity requirements
- Prepare environment setup checklist
- Set up test environment and test data
- Perform smoke test on the build
- Accept/reject the build depending on smoke test result

5 TEST EXECUTION

- Execute tests according to plan
- Document test results and log defects for failed cases
- Update test plans/test cases if necessary
- Map defects to test cases in RTM
- Retest defect fixes
- Perform regression testing
- Track defects to closure

6 TEST CYCLE CLOSURE

- Evaluate cycle completion criteria based on time, test coverage, cost, software quality, critical business objectives
- Prepare test metrics based on above parameters
- Document learning from the project
- Prepare test closure report
- Report qualitative and quantitative results of quality of product to customer
- Analyze test results to find out the defect distribution by type and severity