**Introduction:**

1. SDLC(Software Development Life Cycle)  
   a. Sequential Models(Water fall model, V model)

b. Iterative or Incremental Models(Spiral Model, Agile models)

1. Test Levels  
   There are 4 levels of testing available in testing industry  
   1. Unit (or component or program or module) testing in this the individual unit will be tested generally the developers do the unit testing(Testers: Developers) here the internal structures is tested like code  
   2. Integration Testing (Testers: Developers)  
   3. System Testing(Testers: Independent Testers) here only the external functional testing is performed . Testers like us are responsible for performing this testing type  
   4. Acceptance Testing . End user or customer perform this testing type
2. Test Types  
   a. Functional testing(85% market use this)  
    Verify the system functionality based on requirements  
   b. Non-Functional Testing(10 to 15% market use this)  
    Verify the system quality attributes based on nonfunctional requirements. Type are 1.performance, load, stress testing 2. Usability testing 3. configuration Testing 4. Recovery testing 5. Reliability testing 6. Localization testing 7. Internationalization testing like this so many types are available in Non functionality testing.
3. Test Design Techniques   
    there are 3 types of testing design testing techniques are available  
   **1. White Box**: developers use this techniques. There are few types of this are 1. Statement testing . 2 Decision testing . 3. Condition Testing  
   **2. Black Box:** Individual Testers like us perform this testing . the types on Black box testing techniques are 1. Equivalent class or Equivalent partitions(EC or EP)3. Boundary value analysis 4. Decision Tables 5. State transition testing 6.Use Case testing etc…

**3. Experienced Based** techniques is informal technique the type of this techniques are 1. Error guessing 2. Exploratory testing

1. Software test Process or STLC(Software Testing Life Cycle): this is formal testing process. There are 4 stages are available in STLC process  
   1. Test Planning: In here the test lead do the test planning and the important task are as below  
    a. Understanding and analyzing the requirements.

b. Risk Analysis.

c. Test Strategy implementation

d. Test Estimations (Budget, Time, Resources and Scope of the project like Enterprise resource planning (ERP).

e. Team formation

f. Test Plan documentation

g. Configuration Management planning in this storing and organizing all configurable items like Software, hardware ,documents during testing etc.. need for any projects.

h. Defining Test Environment setup(Test Labs) Test lead defines test environment setup like required software ,hardware etc.. and the technical support administrators implements the environments and the testers verify the test environment set up

2. Test Design: The primary role in this is of the testers. The team lead just guide and monitors the team and controls the team

1. Generating test Scenarios or outlines

2. Testcase documentation

3. Test data collection

3. Test Execution

1. Verify the test Environment set up

2. Create the test batches (queue)

3. Test Execution is a task in execution

1. Sanity or smoke or build verification testing (BVT) or build acceptance testing(BAT).In sanity we test the basic functionality of the build like installing and other basic functionalities tests.

2. Comprehensive testing means executing all possible testcases

3. defect reporting

4. Defect tracking, tracking for status

5. Regression testing this will be performed after getting modified build there are two types of regression 1) General Regression 2) Final Regression

4. Test Closure:

1. Evaluating the exit criteria we can be find this in test plan document. Test

lead prepares this entry, exit, suspension criteria in test plan document. The exit

criteria describes when to stop the testing . After evaluating the exit criteria test

lead decides when to stop the testing. We can fins the exit and entry criteria in Testplan Document

2. Collecting all artifacts from the Test Activities

3. Test Summary report test lead prepares test Summary report. This is the summarizing all test activities like number of Testcase written, executed , number of bugs findings , bug closing , bug reopening etc.

4. Sending Test Deliverables to the customer. The customer side people will have to perform the acceptance testing for which they required all documents. The documents which testers use during the testing all come under the Test Deliverables such as testplan, test summary, defect reports etc.

**Quality Standards:**

1. ISO(international Standers Organization) provides terms and Process
2. IEEE(Institute of Electrical and Electronics Engineers) provides terms, Test Documentations format or Templates
3. CMM\CMMI(coordinate measuring machine or Capability Maturity Model Integration) provides process

**Domain Knowledge: only for Experienced people**

1. BFSI(Banking Financial services and insurance (35%)
2. ERP(Enterprise resource planning )
3. Telecom
4. Heath care
5. E commerce
6. Retail Market

Etc..

In manual testing the reasoning and the documentation is the most important things

Template is predefined format and the test document is format with information.

Test Documents: the import ant documents in Testing are

1. Test plan documents
2. Test case
3. Test data
4. Defect report
5. Test summary report