What is Exploratory Testing?

➔ tester actively explores the application while testing it, instead of strictly following a set of pre-written test cases.

What is traceability matrix?

➔ A traceability matrix is a document used in software testing to ensure that every requirement is covered by test cases and that nothing is missing.

What is Boundary value testing?

➔ Boundary value testing is a type of black box testing techniques are helpful for detecting any errors that happened at the boundary value of valid or invalid partitions rather than focusing on the enter of input data.

Example - **Valid value = 1 to 100**

Invalid	Valid	Invalid
0	2,5,7,15,…..,99	101

What is Equivalence partitioning testing?

➔ Equivalence partitioning testing is a type of black box testing. It is use to divied test data valid & invalid parts, invalid data should not allows and valid data should allows.

➔ **Example – IF value >= 1 AND Value <= 100 Then**

Out of Range	In Range	Out of Range
-1,0	1,19,37,99,100	101

What is Integration testing?

➔ Integration testing is the second level of the software testing process.

➔ In integration testing individual modules are combined and tested as a group to ensure they work together correctly.

➔ Tester check correctness of data flow between two modules.

What determines the level of risk?

➔ Risk analysis should be used to determine what to test in each component and just as importantly what not to test.

What is Alpha testing?

➔ Alpha testing is a type of user acceptance testing.

➔ Alpha testing is performed to identify bugs before releasing the product to the customer.

➔ Alpha testing involves both Whitebox and Blackbox testing.

➔ Alpha testing is performed at developer site.

➔ Sometime it is also performed by independent testing team.

What is beta testing?

- ➔ Beta testing is a type of user acceptance testing.
- ➔ Beta testing is the final testing phase where companies release the software to a few real users to use in real world conditions.

What is component testing?

- ➔ Component testing is the first level of software testing .
- ➔ Component testing is also called unit testing.
- ➔ In the unit testing individual units or components of a software are tested.
- ➔ A unit may be a individual function, module or object in program.
- ➔ Every module of project check one by one.
- ➔ It is used white box testing techniques.

What is functional system testing?

- ➔ In this testing we validate the internal functionality of the application is working as per customers requirements or not.

What is Non-Functional Testing?

- ➔ in this testing we validate the external functionality of the application.
- ➔ In this testing we check performance, usability, reliability of a software application.

What is GUI Testing?

- ➔ GUI testing (Graphical user interface) is a process of testing the user interface of an application.
- ➔ A GUI includes all the elements such as menu, checkbox, buttons, colors, fonts, sizes, icons, content & images.

What is Ad hoc testing?

- ➔ Ad hoc testing is a type of software testing performed without any documentation, planning, or test cases.
- ➔ Ad hoc testing means randomly testing the functionality.
- ➔ When a tester should have knowledge of an application but don't have requirements or test cases.

What is white box testing and list the types of white box testing?

- ➔ White box testing is also called clear box, glass box.
- ➔ White box testing is a software testing method where the tester has full knowledge of the internal structure, code and logic of the application.
- ➔ **There are three types of coverage:**
  1. Statement coverage
  2. Decision Coverage
  3. Condition Coverage

What is black box testing? What are the different black box testing techniques?

- ➔ In the black box testing, we check functionalities of software application are tested without having knowledge of internal structure, code.
- ➔ Tester gives input value to check its functionality & check function is giving expected output or not.
- ➔ **There are Four types of Techniques:**
  1. Equivalence Partitioning
  2. Boundary Value Analysis
  3. Decision Table Testing
  4. State Transition Testing

Mention what big bang testing is?

- ➔ Big Bang testing is a type of integration testing.
- ➔ In the big bang testing all modules are combined together at once and tested as a whole.

What is the purpose of exit criteria?

- ➔ Software testing is to define when testing can be considered complete and software is ready for release.

When should "Regression Testing" be performed ?

- ➔ In the regression testing we check that newly added functionality is affected on existing functionality or not.
- ➔ When a major bug is fixed or a customer change in requirement then we go for regression testing.
- ➔ In this testing we execute all test cases returned for the module.

What is 7 key principles? Explain in detail?

- ➔ **1) Testing show presence of defects –**
  - testing can show that defects are present but cannot prove that there are no defects.
  - Even multiple testing can never ensure that software is 100% bug free

2) Exhaustive testing is possible –

- Testing everything including all combinations of inputs and preconditions is not possible
- Software can never test at every test cases
- It can test only some test cases and assume that software is correct and it will produce the correct output in every test cases

3) Early testing -

- Testing activities should start as early as possible in the software or system development life cycle and should be focused on defined objectives
- For better performance of software

4) Defect clustering –

- A small number of modules contain most of the defects, discovered during pre-release testing, or are responsible for most operational failures.
- They are clustered.

5) Pesticide paradox –

- Repeating the same test cases again and again will not find new bugs.
- It is necessary to review the test cases and add or update test cases to find new bugs.

6) Testing is context dependent –

- Testing is basically context dependent
- Different types of software need to perform different types of testing

7) Absence of errors fallacy –

- If the system built is unusable and does not fulfil the user's needs and expectations then finding and fixing defects does not help

Difference between QA v/s QC v/s Tester

QA (Quality Assurance)	QC (Quality Control)	Testing
QA is Process oriented	QC is product oriented	Testing is product oriented
Focuses on Processes and preventing defects	Focuses on Identifying the defects	Focuses on Testing
It is a subset of STLC	QC can be considered as the subset of Quality Assurance	Testing is the subset of Quality Control

Difference between Smoke and Sanity?

Smoke	Sanity
Smoke testing is part of acceptance testing	Sanity testing is part of regression testing
Testing on newly build to check basic functionality is working fine or not	Testing on build to check fixed bugs are working or not
Documentation is required	Documentation is not required

Difference between verification and Validation

Verification	Validation
Check whether we are developing the right product or not.	Check whether the developed product is right
Verification includes different methods like inspections, reviews, and walkthroughs	In the validation testing, we can find those bugs, which are not caught the verification process.
In verification testing, we can find the bugs early in the development phase of the product	Validation includes testing like functional testing, system testing, integration, and user acceptance testing
The goal of verification is application and software architecture and specification.	The goal of validation is an actual product.

What is Error, Defect, Bug and failure?

- **Error –** A mistake in coding is called error
- **Defect –** error found by tester is called defect
- **Bug –** defect accepted by development team then it is called bug.
- **Failure –** build does not match the requirements then it is called failure

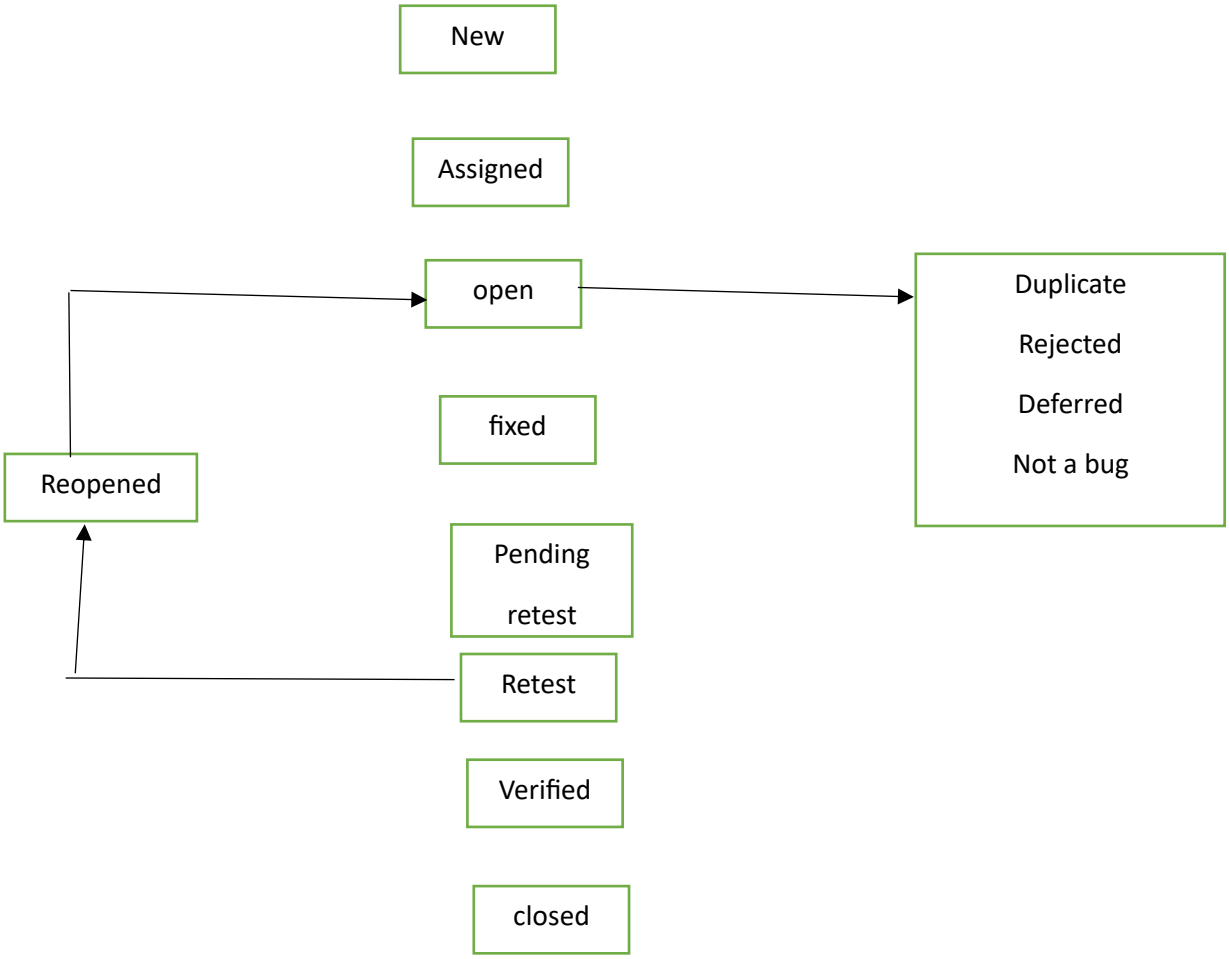
Difference between priority and severity

- **Priority –** priority determines the defect urgency of repair.
- How soon we need to fix.
- Priority is given by test lead or project manager.
- Levels – fix before next build to test, fix before final release

- **Severity** – severity determines the defects effect on the application
- How bad the defect is
- Severity is given by QA testers
- Levels – critical, High, Medium, Low

What is Bug Life Cycle?

- The defects is found and the time that it is closed successfully, rejected, postponed or deferred is called as bug life cycle.



Explain the difference between Functional testing and Non-Functional testing.

Functional testing	Non-Functional testing
Test the functionality of the software	Test the non-functional aspects or readiness of the software including performance, usability, reliability.
It has to be done before non-functional testing.	It will be done after functional testing completes.
It is also called as behavioural testing and focuses on the underlying application features.	Focuses on the performance of the application.
It can be done manually.	Its hard to do it manually.

What is the difference between the STLC (Software Testing Life Cycle) and SDLC (Software Development Life Cycle)?

- ➔ **STLC**- It is the process of testing the software to make sure it's working correctly and meets quality standards.

- ➔ **SDLC**- It is the complete process of developing software from the idea to the final product.

What is the difference between test scenarios, test cases, and test script?

- ➔ **Test Scenarios** – test scenarios are short descriptions of the functionalities that can be tested. It is also called test condition.
- ➔ **Test Cases** – it is a document that contains the steps that have to be executed.
- ➔ **Test Script** – test scripts is a piece of code that is used to test the functionality.

Explain what Test Plan is? What is the information that should be covered.

- ➔ The test plan is a document that describes all the testing activities carried out for that project.
- ➔ Test manager is creating a test plan document.
- ➔ In the test plan documents include resources allocation, job allocation and estimation.

What are the different Methodologies in Agile Development Model?

- ➔ Scrum
- ➔ kanban

Explain the difference between Authorization and Authentication in Web testing.

- ➔ **Authorization –** user authorities are check for accessing the resource
- ➔ **Authentication -** identify of the users are checked for providing access to the system.

What are the common problems faced in Web testing?

- ➔ 1. Browser compatibility issues
  2.Responsive Design Problem
  3. broken links
  4.Performance issues
  5. Session management problems
  6. Functionality Error
  7. third-party integration failures