1. What is exploratory testing?

Ans:- Exploratory Testing is a type of software testing where Test cases are not created in advance but testers check system on the fly. They may note down ideas about what to test before test execution. The focus of exploratory testing is more on testing as a “thinking” activity.

2. What is traceability matrix?

Ans:- A traceability matrix in software testing otherwise known as a test matrix is used to prove that tests have been run. It documents test cases, test runs, and test results. Requirements and issues may also be used in a test matrix.

3. What is boundary value testing?

Ans:- Boundary testing is the process of testing between extreme ends or boundaries between partitions of the input values.

- So these extreme ends like Start- End, Lower- Upper, Maximum-Minimum, Just Inside-Just Outside values are called boundary values and the testing is called boundary testing.

4. What is equivalence partitioning testing?

Ans:- Equivalence partitioning or equivalence class partitioning is a software testing technique that divides the input data of a software unit into partitions of equivalent data from which test cases can be derived.

5. What is integration testing?

Ans:- Integration Testing is defined as a type of testing where software modules are integrated logically and tested as a group. A typical software project consists of multiple software modules, coded by different programmers. The purpose of this level of testing is to expose defects in the interaction between these software modules when they are integrated.

6. What determines the level of risk?

Ans:- As Risk is determined by a combination of Probability and Severity, the main area of the Matrix reveals the Risk Levels. The levels

are Low, Medium, High, and Extremely High. To have a low level of risk, we must have a somewhat limited probability and level of severity.

7. What is alpha testing?

Ans:- Alpha Testing is a type of acceptance testing performed to identify all possible issues and bugs before releasing the final product to the end users. Alpha testing is carried out by the testers who are internal employees of the organization. The main goal is to identify the tasks that a typical user might perform and test them.

8. What is beta testing?

Ans:- Beta Testing is performed by real users of the software application in real environment and it can be considered as a form of external user acceptance testing. It is the final test before shipping a product to the customers. Direct feedback from customers is a major advantage of Beta Testing. This testing helps to test products in customer's environment.

9. What is component testing?

Ans:- Component testing is defined as a software testing type in which the testing is performed on each individual component separately without integrating with other components. It's also referred to as Module Testing when it is viewed from an architecture perspective. Component Testing is also referred to as Unit Testing, Program Testing or Module Testing.

10. What is functional testing?

Ans:- Functional Testing is a type of software testing that validates the software system against the functional requirements/specifications. The purpose of Functional tests is to test each function of the software application, by providing appropriate input, verifying the output against the Functional requirements.

11. What is non-functional testing?

Ans:- Non-Functional Testing is defined as a type of Software testing to check non-functional aspects (performance, usability) of a software application. It is designed to test the readiness of a system as per nonfunctional parameters which are never addressed by functional testing.

12. What is GUI testing?

Ans:- GUI Testing is a software testing type that checks the Graphical User Interface of the Software. The purpose of Graphical User Interface Testing is to ensure the functionalities of software application work as per specifications by checking screens and controls like menus, buttons, icons, etc.

13. What is Adhoc testing?

Ans:- Adhoc Testing is an informal or unstructured software testing type that aims to break the testing process in order to find possible defects or errors at an early possible stage. Ad hoc testing is done randomly and it is usually an unplanned activity which does not follow any documentation and test design techniques to create test cases.

14. What is load testing?

Ans:- Load testing is the process of putting simulated demand on software, an application or website in a way that tests or demonstrates it's behavior under various conditions.

15. What is stress testing?

Ans**:-** Stress Testing is a type of software testing that verifies stability & reliability of software application. The goal of Stress testing is measuring software on its robustness and error handling capabilities under extremely heavy load conditions and ensuring that software doesn't crash under crunch situations. It even tests beyond normal operating points and evaluates how software works under extreme conditions.

16. What is white box testing and list the types of white box testing techniques?

Ans:- White Box Testing is a testing technique in which software's internal structure, design, and coding are tested to verify input-output flow and improve design, usability, and security. In white box testing, code is visible to testers, so it is also called Clear box testing, Open box testing, Transparent box testing, Code-based testing, and Glass box testing.

Various techniques of white box testing is given below:-

- Statement Coverage
- Condition Coverage
- Decision Coverage/Branch Coverage

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

Ans:- lack Box Testing is a software testing method in which the functionalities of software applications are tested without having knowledge of internal code structure, implementation details and internal paths. Black Box Testing mainly focuses on input and output of software applications and it is entirely based on software requirements and specifications. It is also known as Behavioral Testing.

Various techniques of black box testing is given below:-

- Equivalence partitioning
- Boundary value analysis
- Decision Table
- State Transaction Testing
- Use case Testing

18. Mention what are the categories of defects?

Ans:- different categories of defect is given below:-

- Error of Commission
- Errors of Omissions
- Error of Speed or Capacity
- Error of Clarity

19. Mention what bigbang testing is?

Ans:- Big Bang Testing is an Integration testing approach in which all the components or modules are integrated together at once and then tested as a unit

20. What is the purpose of exit criteria?

Ans:- Exit criterion is used to determine whether a given test activity has been completed or NOT. Exit criteria can be defined for all of the test activities right from planning, specification and execution. Exit criterion should be part of test plan and decided in the planning stage.

21. When should “Regression Testing” be performed?

Ans:- Regression Testing is defined as a type of software testing to confirm that a recent program or code change has not adversely affected existing features. Regression Testing is nothing but a full or

partial selection of already executed test cases that are re-executed to ensure existing functionalities work fine.

22. What is 7 key principles? Explain in detail?

Ans:-

1. Testing shows presence of defects
2. Exhaustive testing is not possible
3. Early testing
4. Defect clustering
5. Pesticide paradox
6. Testing is context dependent
7. Absence of errors fallacy

23. Different between QA, QC, and tester?

Ans:-

Testing: Testing the software system is about finding any mistakes or issues.

Quality control: A product-oriented approach is a way to make sure the software meets all its requirements.

Quality assurance: Process-oriented focuses on making the process of creating software better.

24. Difference between Smoke and Sanity?

Ans:- Smoke Testing verifies the All functionalities of the system whereas Sanity Testing verifies the new functionality like bug fixes.

- Smoke Testing is done by both developers or testers whereas Sanity Testing is done by testers.
- Smoke testing is a subset of acceptance testing whereas Sanity testing is a subset of Regression Testing.

25. Difference between verification and validation

Ans:- Verification process includes checking documents, design, code, and program, whereas Validation process includes testing and validation of the actual product.

- Verification does not involve code execution, while Validation involves code execution.

26. What is Error, Defect, Bug and failure?

Ans:- Error:- The Problem in code leads to errors, which means that a mistake can occur due to the developer's coding error as the developer misunderstood the requirement or the requirement was not defined correctly. The developers use the term error.

Defect:- When the application is not working as per the requirement is knows as defects. It is specified as the aberration from the actual and expected result of the application or software.

Bugs:- In software testing, a bug is the informal name of defects, which means that software or application is not working as per the requirement. When we have some coding error, it leads a program to its breakdown, which is known as a bug. The test engineers use the terminology Bug.

Failure:- In other words, we can say that if an end-user detects an issue in the product, then that particular issue is called a failure.

27. Different between priority and severity?

Ans:- priority: Priority is defined as the order in which a defect should be fixed. Higher the priority the sooner the defect should be resolved.

Severity:- Defect Severity is defined as the degree of impact that a defect has on the operation of the product

28. What is bug life cycle?

Ans:- Defect Life Cycle or Bug Life Cycle in software testing is the specific set of states that defect or bug goes through in its entire life. The purpose of Defect life cycle is to easily coordinate and communicate

current status of defect which changes to various assignees and make the defect fixing process systematic and efficient.

29. Explain the difference between Functional testing and NonFunctional testing

- Ans:- Functional testing verifies each function/feature of the software whereas Non Functional testing verifies non-functional aspects like performance, usability, reliability, etc.

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

- Ans:- SDLC defines all the standard phases which are involved during the software development process, whereas the STLC process defines various activities to improve the quality of the product.
- SDLC is a Development Life Cycle, whereas STLC is a Testing Life Cycle.

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

Ans:- test scenarios:- A Test Scenario is defined as any functionality that can be tested.

Test test case:- A Test Case is a set of actions executed to verify a particular feature or functionality of your software application. A test case contains test steps, test data, precondition, and postcondition developed for a specific test scenario to verify any requirement.

Test script:- Test Scripts are a line-by-line description containing the information about the system transactions that should be performed to validate the application or system under test. Test script should list out each step that should be taken with the expected results.

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

Ans:- A Test Plan is a detailed document that describes the test strategy, objectives, schedule, estimation, deliverables, and resources

required to perform testing for a software product. Test Plan helps us determine the effort needed to validate the quality of the application under test. The test plan serves as a blueprint to conduct software testing activities as a defined process, which is minutely monitored and controlled by the test manager.

33. What is priority?

Ans:- Priority is defined as the order in which a defect should be fixed. Higher the priority the sooner the defect should be resolved.

34. What is severity?

Ans:- Defect Severity is defined as the degree of impact that a defect has on the operation of the product.

35. Bugs categories are?

Ans: - there are different categories of bugs security bugs, user interface bugs, functional bugs, database bugs.

36. What are the different Methodologies in Agile Development Model?

Ans:- The Agile Model is an incremental and iterative process of software development. It defines each iteration's number, duration, and scope in advance. Every iteration is considered a short "frame" in the Agile process model, which mostly lasts from two to four weeks. Agile Model divides tasks into time boxes to provide specific functionality for the release. Each build is incremental in terms of functionality, with the final build containing all the attributes. The division of the entire project into small parts helps minimize the project risk and the overall project delivery time.

Pros :-

○ Frequent delivery

○ Face to face communication

○ Requirement Change

○ Time

- Cons :-

  - Less documentation

  - Maintenance problem

37. Explain the difference between Authorization and Authentication in Web testing.What are the common problems faced in Web testing?

Ans:- In the authentication process, the identity of users are checked for providing the access to the system.

While in authorization process, a the person's or user's authorities are checked for accessing the resources.

38. When to used Usablity Testing?

Ans:- Usability Testing also known as User Experience (UX) Testing, is a testing method for measuring how easy and user-friendly a software application is. A small set of target end-users, use software application to expose usability defects. Usability testing mainly focuses on user's ease of using application, flexibility of application to handle controls and ability of application to meet its objectives.

39. What is the procedure for GUI Testing?

Ans:- GUI Testing is a software testing type that checks the Graphical User Interface of the Software. The purpose of Graphical User Interface (GUI) Testing is to ensure the functionalities of software application work as per specifications by checking screens and controls like menus, buttons, icons, etc.