1. What is software testing?

Software Testing is a method to check whether the actual software product matches expected requirements and to ensure that software product is Defect free.

**2. What is STLC?**

STLC stands for Software Testing Life Cycle. STLC is a sequence of different activities performed by the testing team to ensure the quality of the software or the product.

3. Describe STLC stages?

 Requirement Analysis

 Test Planning − Test Team plans the strategy and approach.

 Test Case Designing − Develop the test cases based on scope and criteria.

 Test Environment Setup − When integrated environment is ready to validate the product.

 Test Execution − Real-time validation of product and finding bugs.

 Test Closure

**4. What is test scenario?**

A Test Scenario is a statement describing the functionality of the application to be tested. It is used for end-to-end testing of a feature and is generally derived from the use cases.

**5.What is test case?**

Group of conditions under which a tester determines whether a software application is working as per the customer’s requirements or not. Test case designing includes preconditions, case name, input conditions, and expected result.

**6.What is test data?**

Data created or selected to satisfy the execution preconditions and inputs to execute one or more test cases. / Data used for testing purposes.

**7.What are the various Blackbox test design techniques?**

There are various techniques used-

 decision table technique

 boundary value analysis technique

 state transition

 All-pair testing

 cause-effect graph technique

 equivalence partitioning technique

 error guessing technique

 use case technique

 user story technique

**8.Describe boundary value analysis.**

Boundary value analysis is a black box testing technique. It is closely associated with equivalence class partitioning. In this technique, we analyze the behavior of the application with test data residing at the boundary values of the equivalence classes.

**9.Describe equivalence class partitioning**.

Equivalence class partitioning is a black-box testing technique or specification-based testing technique in which we group the input data into logical partitions called equivalence classes.

All the data items lying in an equivalence class are assumed to be processed in the same way by the software application to be tested when passed as input.

**10.What are the various levels of testing?**

we have four different levels of testing,

• Unit Testing

• Integration Testing

• System Testing

• Acceptance Testing

 Compatibility Testing

o Grey Box Testing

 Automation Testing

 Compatibility Testing

o Grey Box Testing

 Automation Testing

**11.Describe various approaches in integration testing.**

 big-bang

 top-down

 bottom-up

 sandwich/hybrid testing

**12. What are the different types of testing?**

 Manual Testing

o White Box Testing

o Black Box Testing

 Functional Testing

 Unit Testing

 Integration Testing

o Incremental Testing

 Top-down Incremental Integration Testing

 Bottom-up Incremental Integration Testing

o Non-Incremental Testing

 System Testing

 Non-function Testing

 Performance Testing

o Load Testing

o Stress Testing

o Scalability Testing

o Stability Testing

 Usability Testing

 Compatibility Testing

o Grey Box Testing

 Automation Testing

**13. What is the difference between smoke and sanity testing?**

Smoke Testing is performed to ascertain that the critical functionalities of the program are working fine. Sanity testing is done at random to verify that each functionality is working as expected. Smoke testing exercises the entire system from end to end.

**14. What is review?**

A systematic examination of a document by one or more people with the main aim of finding and removing errors early in the software development life cycle

**15. Explain review process.**

The procedure where reporting manager or team leader evaluates employees' accomplishments and progress towards the objective and goals.

**16. Explain different roles involved in inspection**

 Moderator

 Author

 Reader

 Recorder

 Inspector

**17. Explain different stages of inspection**

• Planning

• Overview Meeting

• Preparation

• Inspection Meeting

• Follow Up

**18. Explain defect life cycle**

Is a flaw or an error in an application that is restricting the normal flow of an application by mismatching the expected behaviour of an application with the actual one.

**19. Explain difference between priority and severity**

The impact of the bug on the application is known as severity. It can be a blocker, critical, major, and minor for the bug. Priority is important for fixing the bug or which bug to be fixed first or how soon the bug should be fixed. It can be urgent, high, medium, and low.

**20. Explain various priority levels**

High: it is a major impact on the customer application, and it must be fixed first. Medium: In this, the problem should be fixed before the release of the current version in development. Low: The flow should be fixed if there is time, but it can be deferred with the next release.

**21. Explain various severity levels**

Major: if it is major, which means that the supporting components and modules are not working fine, but test engineer can continue the testing. Minor: if the severity of a bug is major, which means that all the U.I problems are not working fine, but testing can be processed without interruption.

**22. Explain test case attributes**

 Test Case Id

 Test Summary

 Description

 Prerequisite or pre-condition

 Test Steps

 Test Data

 Expected result

 Actual result

 Test Result

 Automation Status

 Date

 Executed by

**23. What is test suite?**

Test suite is a container that has a set of tests which helps testers in executing and reporting the test execution status.

**24. What is the difference between alpha and beta testing?**

Alpha Testing is a type of software testing performed to identify bugs before releasing the product to real users or to the public. Alpha Testing is one of the user acceptance tests.

Beta Testing is performed by real users of the software application in a real environment. Beta testing is one type of User Acceptance Testing.

**25. What is API testing?**

API testing is a type of software testing where application programming interfaces (APIs) are tested to determine if they meet expectations for functionality, reliability, performance, and security.

**26. What is API testing?**

Application Programming Interface.

**27. What is the difference between bug, defect and failure?**

A mistake in coding is called Error, error found by tester is called Defect, defect accepted by development team then it is called Bug, build does not meet the requirements then it Is Failure.

28. What is RTM?

Requirements Traceability Matrix (RTM) is a document used to ensure that the requirements defined for a system are linked at every point during the verification process.

**29. What is retesting?**

Retesting is a procedure where we need to check that particular test cases which are found with some bugs during the execution time. Retesting also occurs when the product is already tested and due to some problems, it needs to be tested again. This test is named as retesting.

**30. What is regression testing?**

Regression testing is a sort of testing that is used to ensure that a software update does not affect the product's current functioning.

**41. What is performance testing?**

Performance testing that focuses on how a system running the system performs under a particular load. It can be used to analyze various success factors such as response times and potential errors. With these performance results in hand, one can easily identify bottlenecks, bugs, and mistakes and decide how to optimize your application to eliminate the problem(s).

**42. Explain agile methodology?**

It is a way to manage a project by breaking it up into several phases. It involves constant collaboration with stakeholders and continuous improvement at every stage. Once the work begins, teams cycle through a process of planning, executing, and evaluating. The three key things that will enable the project to be a success are: collaboration, constant-

focus on business value, and appropriate level of quality.

**43. What is scrum?**

It is the type of Agile framework. It is a framework within which people can address complex adaptive problem while productivity and creativity of

delivering product is at highest possible values. Scrum is broken down into shorter sprints and smaller deliverables, while in Agile everything is delivered at the end of the project.

**44. What are the different roles in agile?**

The four different roles in agile are Team Lead, Scrum Master (Scrum), Team Coach, or Project Lead .

**45. What are the various types of meetings conducted in sprint cycle and explain them.**

There are basically 6 types of meetings conducted in sprint cycle.

• Sprint Planning Meeting.

• Daily Scrum Meeting.

• Sprint Review Meeting.

• Sprint Retrospective Meeting.

• Backlog Refinement Meeting.

The core objective of the sprint meeting is to demonstrate the functionality of the product and what has been achieved during a particular Sprint.

**\* Sprint Planning Meeting**

The goal of this meeting is to develop realistic Sprint backlog and define the highest priority tasks which need to be done during the length of each Sprint.

During the meeting, team members also communicate the amount of work they can complete in a particular timeframe, so basically, at the end of this meeting, development team comes back

with a Sprint goal, as well as a Sprint Backlog.

**\* Daily Scrum Meeting .**

Basically, just a short 15 minutes meetings which occur on daily basis. They are typically held at the same time and same place every day and are strictly timeboxed to no longer than 15 minutes.

**\* Sprint Review Meeting**

The core objective of this meeting is to demonstrate the functionality of the product and what has been achieved during a particular Sprint.

**\* Sprint Retrospective Meeting**

Sprint retrospective meeting- as the name suggests- is solely held with a fundamental purpose of reviewing what went right and wrong during a Sprint.

The meeting brings forth a great opportunity for the entire team to reflect on the work and what improvements are needed to be made.

**\*Backlog Refinement Meeting**

The last type of Scrum meetings is the backlog refinement meeting, also known as the product backlog grooming. Mostly, product backlog items need refinement for the next Sprint, to make the team understand them better for successful execution.

**46. What done indicates in scrum?**

The "Done" indicates a collection of criteria that must be completed for a project. It is essentially a checklist used by Scrum teams to create a shared understanding of what is required to make a product releasable.

**47. Explain Kanban task board ?**

Kanban board is an agile project management tool designed to help visualize work, limit work-in-progress, and maximize efficiency (or flow). It can help both agile and DevOps teams establish order in their daily work.

**48. Explain daily scrum meeting ?**

The daily scrum, also called the standup, is a short daily meeting designed to let the team plan out its work for the day and identify any obstacles that could impact that work.

**49. Who will attend daily scrum meeting ?**

Every member of the team should attend the daily scrum. The scrum master, product owner, developers, and designers. A scrum of scrums involves multiple scrum teams meeting together by having one or two representatives from each separate scrum getting together.

**50. What is user story and epic?**

An agile epic is a body of work that can be broken down into specific tasks (called user stories) based on the needs/requests of customers or end-users. Epics are an important practice for agile and DevOps teams. When adopting agile and DevOps, an epic serves to manage tasks.