**1)What is software testing?**

->**Software testing** is the process of evaluating and verifying that a software application or system functions as intended.

**2)How may types of Software testing?**

* Functional testing
* Non-Functional

3)**Explain different phase of Software life cycle?**

-> The phases of the SDLC are

* Requirement Analysis
* Planning
* Design
* Development
* Testing
* Deployment
* Maintenance.

4).**What is Traceability Matrix.?**

**->** The Traceability Matrix (TM) is a document that maps and tracks the relationship between requirements and their corresponding test cases. It ensures that all requirements are covered by tests and helps identify missing or untested functionalities.

**5)What is different between functional and non-functional Testing?**

* **Functional Testing**
* Tests the functional aspects of the software to ensure it works as per requirements (e.g., features, actions, and operations).
* **Non-Functional Testing**
* Tests the quality attributes of the software, such as performance, usability, reliability, and scalability.

**6)** **what is test case?**

->A test case is a set of specific conditions, inputs, steps, and expected outcomes used to verify that a particular functionality or feature of software works as intended.

Key Components of a Test Case:

1. Test Case ID: Unique identifier.
2. Test Objective: What is being tested.
3. Preconditions: Setup required before execution.
4. Steps: Actions to perform.
5. Expected Result: The anticipated outcome.
6. Actual Result: Outcome after execution (used during testing).

Test cases ensure thorough testing and consistency.

**7) what is different between testing tools?**

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| --- |
| * Functional Testing Tools |

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| --- |
| * Non-Functional Testing Tools |

|  |
| --- |
| * Management Tools |

**8)** **what is advantage of manual testing?**

* Human Perspective
* Flexibility
* Cost-Effective for Small Projects
* Exploratory Testing
* Quick Setup
* Ad-Hoc Testing
* Immediate Feedback
* Low Resource Requirements

**9) what is SDLC?**

**->**SDLC (Software Development Life Cycle) is a structured process for planning, developing, testing, deploying, and maintaining software. It ensures high-quality software delivery within a set timeline and budget.

10)**Different between Verification and Validation?**

**->**

* Verification= Are we building it right?
* Validation =Area we building the right thing?

**11)** **what is regression testing?**

**->** Regression Testing is a type of software testing that ensures recent changes (like code updates, bug fixes, or new features) have not negatively impacted the existing functionality of the software.

**12)Different between positive and negative testing?**

Positive Testing =Testing what should work.

Negative Testing = Testing what shouldn’t work.

13)**what is early testing?**

-> Early Testing is a principle in software testing that emphasizes starting the testing process as soon as possible in the Software Development Life Cycle (SDLC). The goal is to identify and fix defects early, reducing the overall cost and effort required for corrections later in the development process.

**14)What is Jira?**

->JIRA is a software development tool used for project development and issue tracking.

**15)What is Bugzilla?**

**->**Bugzilla is an open-source bug tracking tool.

->used to track defects or issues in software applications.