**Theory Q & A:**

1. What is data driven testing?

In DDT, the application will be tested with multiple test data and data stored in table or spreadsheet format. The application is tested with a different set of values.

Advantages: When we have do automation testing with some workflow with multiple different data sets, DDT approach is more effective..

Data source can be excel, xml,DB

1. Explain the steps for Bug Cycle

Bug life cycle is process which a defect/bug goes through during its lifetime.

**New:** When test identify the different between actual and expected result, tester will log defect in test management tool with required details and evidences.

**Assigned:** Once the bug created by the tester, Lead/scrum assign bug to the developer team.

Open: During this phase, the developer analyzes the bug and devises a solution to fix it.

**Rejected:** If the developer feels the defect is not a correct defect then it can be “rejected” and then to “closed”.

**Deferred:** If the present bug is not of a prime priority and if it is expected to get fixed in the next release, then status “Deferred”

**Fixed:** Once the issue is resolved, it undergoes unit testing by the developer to ensure the fix is effective and status is changed to “Fixed”.

**Ready to retest:** Retest: Once the defect is fixed the developer gives a particular change for retesting to the tester

**Retest:** Tester does the retesting of the code at this stage to check whether the defect is fixed by the developer or not and changes the status to “Re-test.”

**Reopen:** If the bug exists even after the developer has fixed the bug, the tester changes the status to “reopened”.

**Closed:** If the bug no longer exists then the tester assigns the status “Closed.”

1. Mention the different types of software testing?

* Manual testing – Involves manual inspection and testing of the software by a human tester.
* Automated testing – Involves using software tools to automate the testing process.
* Functional testing – Tests the functional requirements of the software to ensure they are met.
* Non-functional testing – Tests non-functional requirements such as performance, security, and usability.
* Unit testing – Tests individual units or components of the software to ensure they are functioning as intended.
* Integration testing – Tests the integration of different components of the software to ensure they work together as a system.
* System testing – Tests the complete software system to ensure it meets the specified requirements.
* Acceptance testing – Tests the software to ensure it meets the customer’s or end-user’s expectations.
* Regression testing – Tests the software after changes or modifications have been made to ensure the changes have not introduced new defects.
* Performance testing – Tests the software to determine its performance characteristics such as speed, scalability, and stability.
* Security testing – Tests the software to identify vulnerabilities and ensure it meets security requirements.
* Exploratory testing – A type of testing where the tester actively explores the software to find defects, without following a specific test plan.
* Boundary value testing – Tests the software at the boundaries of input values to identify any defects.
* Usability testing – Tests the software to evaluate its user-friendliness and ease of use.
* User acceptance testing (UAT) – Tests the software to determine if it meets the end-user’s needs and expectations.
* Compatibility testing – testing different version of software with available hardware.

1. What is traceability matrix and what information does it contains?

Requirements Traceability Matrix (RTM) is document that helps to Keeping track of project requirements and deliverables in project. This guarantees that the scope and deliverables of the project are in line with the baseline.

It contains:

**Requirement ID-**Tracking reference

**Requirement Type -**Grouping the business requirements by function

**Requirement Description**- Description of the requirement  
**Test Cases Reference-**It can be unit/integration /system/user test cases  
**Test Script-** Test scripts should be prepared for test.

1. What are the automation challenges that testing team faces while testing?   
   1. Maintenance of script/ framework when we have frequent changes in locators and requirements
   2. Test environment stability
   3. Utilization of all the testing phase is challenge. Usually automation script will helps for regression testing and daily sanity check, but it’s difficult to add test on functional test case as a its has short window which manual test will be take place