

1) What is the difference between the QA and software testing?

The role of QA (Quality Assurance) is to monitor the quality of the “process” used to produce the software. While the software testing, is the process of ensuring the functionality of final product meets the user’s requirement.

2) What is Testware?

Testware is test artifacts like test cases, test data, test plans needed to design and execute a test.

3) What is the difference between build and release?

Build: It is a number given to Installable software that is given to the testing team by the development team.

Release: It is a number given to Installable software that is handed over to the customer by the tester or developer.

4) What are the automation challenges that SQA(Software Quality Assurance) team faces while testing?

Mastering the automation tool
Reusability of Automation script
Adaptability of test case for automation
Automating complex test cases.

5) What is bug leakage and bug release?

Bug release is when software or an application is handed over to the testing team knowing that the defect is present in a release. During this the priority and severity of bug is low, as bug can be removed before the final handover.

Bug leakage is something, when the bug is discovered by the end users or customer, and not detected by the testing team while testing the software.

6) What is data driven testing?

Data driven testing is an automation testing framework, which tests the different input values on the AUT. These values are read directly from the data files. The data files may include csv files, excel files, data pools and many more.

7) Explain the steps for Bug Cycle?

Once the bug is identified by the tester, it is assigned to the development manager in open status

If the bug is a valid defect the development team will fix it.

If it is not a valid defect, the defect will be ignored and marked as rejected

The next step will be to check whether it is in scope. If the bug is not the part of the current release then the defects are postponed

If the defect or bug is raised earlier then the tester will assign a DUPLICATE status

When bug is assigned to developer to fix, it will be given a IN-PROGRESS status

Once the defect is repaired, the status will change to FIXED at the end the tester will give CLOSED status if it passes the final test.

8) What does the test strategy include?

The test strategy includes an introduction, resource, scope and schedule for test activities, test tools, test priorities, test planning and the types of test that has to be performed.

9) Mention the different types of software testing?

Unit testing
Integration testing and regression testing
Shakeout testing
Smoke testing
Functional testing
Performance testing
White box and Black box testing
Alpha and Beta testing
Load testing and stress testing
System testing

=====

10) What is branch testing and what is boundary testing?

The testing of all the branches of the code, which is tested once, is known as branch testing. While the testing, which is focused on the limit conditions of the software is known as boundary testing.

=====

11) What are the contents of test plans and test cases?

Testing objectives
Testing scope
Testing the frame
The environment
Reason for testing
The criteria for entrance and exit
Deliverables
Risk factors

=====

12) What is Agile testing and what is the importance of Agile testing?

Agile testing is software testing, is testing using Agile Methodology. The importance of this testing is that, unlike normal testing process, this testing does not wait for the development team to complete the coding first and then doing testing. The coding and testing both goes simultaneously. It requires continuous customer interaction.

=====

13) What is Test case?

Test case is a specific condition to check against the Application Under Test. It has information of test steps, prerequisites, test environment, and outputs.

=====

14) What is the strategy for Automation Test Plan?

The strategy for Automation Test Plan
Preparation of Automation Test Plan
Recording the scenario
Error handler incorporation
Script enhancement by inserting check points and looping constructs
Debugging the script and fixing the issues
Rerunning the script
Reporting the result

=====

15) What is quality audit?

The systematic and independent examination for determining the effectiveness of quality control procedures is known as the quality audit.

=====

16) What are the tools used by a tester while testing?

Selenium
Firebug
OpenSTA
WinSCP
YSlow for FireBug
Web Developer toolbar for firebox
Above are just sample tools. The tools a Tester may vary with his/her project.

=====

17) Explain stress testing, load testing and volume testing?

Load Testing: Testing an application under heavy but expected load is known as Load Testing. Here, the load refers to the large volume of users, messages, requests, data, etc.

Stress Testing: When the load placed on the system is raised or accelerated beyond the normal range then it is known as Stress Testing.

Volume Testing: The process of checking the system, whether the system can handle the required amounts of data, user requests, etc. is known as Volume Testing.

=====

19) What are the five common solutions for software developments problems?

Setting up the requirements criteria, the requirements of a software should be complete, clear and agreed by all
The next thing is the realistic schedule like time for planning , designing, testing, fixing bugs and re-testing

Adequate testing, start the testing immediately after one or more modules development.
Use rapid prototype during design phase so that it can be easy for customers to find what to expect
Use of group communication tools

=====

20) What is a 'USE' case and what does it include?

The document that describes, the user action and system response, for a particular functionality is known as USE case. It includes revision history, table of contents, flow of events, cover page, special requirements, pre-conditions and post-conditions.

=====

21) What is CRUD testing and how to test CRUD?

CRUD stands for Create, Read, Update and Delete. CRUD testing can be done using SQL statements.

=====

23) What is thread testing?

A thread testing is a top-down testing, where the progressive integration of components follows the implementation of subsets of the requirements, as opposed to the integration of components by successively lower levels.

=====

24) What is configuration management?

It is a process to control and document any changes made during the life of a project. Release control, Change control and Revision control are the important aspects of configuration management.

=====

25) What is Ad Hoc testing?

It is a testing phase where the tester tries to break the system by randomly trying the system's functionality. It can include negative testing as well.

=====

26) List out the roles of Software Quality Assurance engineer?

A software quality assurance engineer tasks may include following things amongst others

- Writing source code
- Software design
- Control of source code
- Reviewing code
- Change management
- Configuration management
- Integration of software
- Program testing
- Release management process

=====

27) Explain what are test driver and test stub and why it is required?

The stub is called from the software component to be tested. It is used in top down approach

The driver calls a component to be tested. It is used in bottom up approach

It is required when we need to test the interface between modules X and Y and we have developed only module X. So we cannot just test module X but if there is any dummy module we can use that dummy module to test module X

=====

28) Explain what is Bug triage?

A bug triage is a process to

- Ensure bug report completeness
- Assign and analyze the bug
- Assigning bug to proper bug owner
- Adjust bug severity properly
- Set appropriate bug priority

=====

29) List out various tools required to support testing during development of the application?

To support testing during development of application following tools can be used

Test Management Tools: JIRA, Quality Center etc.
Defect Management Tools: Test Director, Bugzilla

Project Management Tools: Sharepoint
Automation Tools: RFT, QTP, and WinRunner

=====

30) Explain what is a cause effect graph?

A cause effect graph is a graphical representation of inputs and the associated outputs effects that can be used to design test cases.

=====

31) Explain what is Test Metric is software testing and what information does it contains?

In software testing, Test Metric is referred to the standard of test measurement. They are the statistics narrating the structure or content of a testing. It contains information like

Total test
Test run
Test passed
Test failed
Tests deferred
Test passed the first time

=====

32) Explain what is traceability matrix?

A test matrix is used to map test scripts to requirements.

=====

33) Explain what is the difference between Regression testing and Retesting?

Retesting is carried out to check the defects fixes, while regression testing is performed to check whether the defect fix have any impact on other functionality.

=====

34) List out the software quality practices through the software development cycle?

Software quality practices includes
Review the requirements before starting the development phase
Code Review
Write comprehensive test cases
Session based testing
Risk based testing
Prioritize bug based on usage
Form a dedicated security and performance testing team
Run a regression cycle
Perform sanity tests on production
Simulate customer accounts on production
Include software QA Test Reports

=====

35) Explain what is the rule of a "Test Driven Development"?

The rule of a Test Driven Development is to prepare test cases before writing the actual code. Which means you are actually be writing code for the tests before you write code for the application.

=====

36) Mention what are the types of documents in SQA?

The types of documents in SQA are

Requirement Document
Test Metrics
Test cases and Test plan
Task distribution flow chart
Transaction Mix
User profiles
Test log
User profiles
Test incident report
Test summary report

=====

37) Explain what should your QA documents should include?

QA testing document should include

List the number of defects detected as per severity level
Explain each requirement or business function in detail
Inspection reports
Configurations
Test plans and test cases
Bug reports
User manuals
Prepare separate reports for managers and users

=====

38) Explain what is MR and what information does MR consists of?

MR stands for Modification Request also referred as Defect report. It is written for reporting errors/problems/suggestions in the software.

39) What does the software QA document should include?

Software QA document should include

=>Specifications
=>Designs
=>Business rules
=>Configurations
=>Code changes
=>Test plans
=>Test cases
=>Bug reports
=>User manuals, etc

=====

40) Mention how validation activities should be conducted?

Validation activities should be conducted by following techniques

Hire third party independent verification and validation

Assign internal staff members that are not involved in validation and verification activities

Independent evaluation