

Q1. What are the different test levels?

#### ANS:

There are four test levels

- 1. Unit/component/program/module testing
- 2. Integration testing
- 3. System testing
- 4. Acceptance testing

Q2. What is the difference between Testing Techniques and Testing Tools?

## <u>ANS:</u>

Testing technique: Is a process for ensuring that some aspects of the application system or unit functions properly there may be few techniques but many tools.

Testing Tools: Is a vehicle for performing a test process. The tool is a resource to the tester, but itself is insufficient to conduct testing

Q3. What is Integration testing?

### <u>ANS:</u>



Integration testing is a level of software testing process, where individual units of an application are combined and tested. It is usually performed after unit and functional testing.

Q4. What is functional system testing?

### <u>ANS:</u>

Testing the end to end functionality of the system as a whole is defined as a functional system testing.

Q5. What is random/ monkey testing? When it is used?

#### ANS:

Random testing often known as monkey testing. In such type of testing data is generated randomly often using a tool or automated mechanism. With this randomly generated input the system is tested and results are analysed accordingly.

These testing are less reliable; hence it is normally used by the beginners and to see whether the system will hold up under adverse effects.

Q6. Consider the following techniques. Which are static and which are dynamic techniques?



- **1. Equivalence Partitioning.**
- 2. Use Case Testing.
- 3. Data Flow Analysis.
- 4. Exploratory Testing.
- 5. Decision Testing.
- 6. Inspections.

## ANS:

Data Flow Analysis and Inspections are static; Equivalence Partitioning, Use Case Testing, Exploratory Testing and Decision Testing are dynamic.

Q7. What are the Structure - based (white-box) testing techniques?

#### ANS:

Structure - based testing techniques (which are also dynamic rather than static) use the internal structure of the software to derive test cases. They are commonly called white-box or glass - box techniques (implying you can see into the system) since they require knowledge of how the software is implemented, that is, how it works.

For example, a structural technique may be concerned with exercising loops in the software. Different test cases may be derived to exercise the loop once, twice, and many times. This may be done regardless of the functionality of the software.



Q8. What is negative and positive testing?

### <u>ANS:</u>

A negative test is when you put in an invalid input and receives errors. While a positive testing, is when you put in a valid input and expect some action to be completed in accordance with the specification.

Q9. When Regression Testing should be performed?

## <u>ANS:</u>

After the software has changed or when the environment has changed Regression testing should be performed.

Q10. What is the difference between re-testing and regression testing?

### <u>ANS:</u>

Re-testing ensures the original fault has been removed; regression testing looks for unexpected side effects.

Q11. What are the Experience - based testing techniques?



### ANS:

In experience - based techniques, peoples knowledge, skills and background are a prime contributor to the test conditions and test cases. The experience of both technical and business people is important, as they bring different perspectives to the test analysis and design process.

Due to previous experience with similar systems, they may have insights into what could go wrong, which is very useful for testing.

Q12. Which of the following tools would be involved in the automation of regression test?

- a. Data tester
- **b. Boundary tester**
- c. Capture/Playback
- d. Output comparator.

#### ANS: d. Output comparator

Q13. When should testing be stopped?

#### ANS:

It depends on the risks for the system being tested. There are some criteria bases on which you can stop testing.



- 1. Deadlines (Testing, Release)
- 2. Test budget has been depleted
- 3. Bug rate fall below certain level
- 4. Test cases completed with certain percentage passed
- 5. Alpha or beta periods for testing ends
- 6. Coverage of code, functionality or requirements are met to a specified point

Q14. What are semi - random test cases?

#### <u>ANS:</u>

Semi - random test cases are nothing but when we perform random test cases and do equivalence partitioning to those test cases, it removes redundant test cases, thus giving us semi - random test cases.

Q15. What is black box testing? What are the different black box testing techniques?

#### ANS:

Black box testing is the software testing method which is used to test the software without knowing the internal structure of code or program. This testing is usually done to check the functionality of an application.

The different black box testing techniques are



- **1. Equivalence Partitioning**
- 2. Boundary value analysis
- **3.** Cause effect graphing

Q16. What is maintenance testing?

### <u>ANS:</u>

Triggered by modifications, migration or retirement of existing software

Q17. What is Alpha testing?

### <u>ANS:</u>

Pre - release testing by end user representatives at the developers site.

Q18. What is beta testing?

### <u>ANS:</u>

Testing performed by potential customers at their own locations.



Q19. In white box testing what do you verify?

## <u>ANS:</u>

In white box testing following steps are verified.

- **1.** Verify the security holes in the code
- 2. Verify the incomplete or broken paths in the code
- 3. Verify the flow of structure according to the document specification
- 4. Verify the expected outputs

5. Verify all conditional loops in the code to check the complete functionality of the application

6. Verify the line by line coding and cover 100% testing

Q20. What is the KEY difference between preventative and reactive approaches to testing?

#### <u>ANS:</u>

Preventative tests are designed early; reactive tests are designed after the software has been produced.