Name : Vidhi Manglik **QE Competency**

Assignment Testing-Concepts 1

1. Difference between retesting and regression testing?

Ans.

Regression Testing:

- ➔ Regression testing is a type of software testing that intends to ensure that changes like defect fixes or enhancements to the module or application have not affected the unchanged part.
- ➔ Regression testing is not carried out on specific defect fixes. It is planned as a specific area or full regression testing.
- ➔ In Regression testing, you can include the test cases which passed earlier. We can say that check the functionality which was working earlier.

Retesting:

- ➔ Retesting is done to make sure that the tests cases which failed in the last execution are passing after the defects against those failures are fixed.
- ➔ Retesting is carried out based on the defect fixes.
- ➔ In Retesting, you can include the test cases which failed earlier. We can say that check the functionality which was failed in the earlier build.

2. Which of the one are part of functional testing -

a. UAT, Integration, Regression

b. Maintenance, Volume, Performance

c. Sanity, Localization, unit

Ans. **c. Sanity, Localization, unit**

3. System testing is done before integration testing – True/False

Ans. False

4. Confirmation testing is same as regression testing – True/False

Ans. False

5. Difference between static and dynamic testing.

Ans.

Static Testing:

- ➔ In Static Testing, the code is not executed. Rather it manually checks the code, requirement documents, and design documents to find errors.
- ➔ The objective of this testing is to improve the quality of software products by finding errors in the early stages of the development cycle. This testing is also called a Non-execution technique or verification testing.
- ➔ Static testing involves manual or automated reviews of the documents. This review is done during an initial phase of testing to catch Defect early in STLC. It examines work documents and provides review comments.

Dynamic Testing:

- ➔ Dynamic Testing, a code is executed. It checks for the functional behavior of the software system, memory/CPU usage and overall performance of the system.
- ➔ The main objective of this testing is to confirm that the software product works in conformance with the business requirements. This testing is also called an Execution technique or validation testing.
- ➔ Dynamic testing executes the software and validates the output with the expected outcome. Dynamic testing is performed at all levels of testing and it can be either black or white box testing.

6. Difference between SDLC & STLC

Ans.

Software Development Life Cycle or SDLC describes the various phases involved in the software development process. The different phases of Software Development Life Cycle are-

- ➔ Requirement Gathering
- ➔ Designing
- ➔ Coding/Implementation
- ➔ Testing
- ➔ Deployment
- ➔ Maintenance

Software testing life cycle or STLC refers to all these activities performed during the testing of a software product. The different phases of Software Testing Life Cycle are-

- ➔ Requirement Analysis
- ➔ Test Planning
- ➔ Test Analysis and Design
- ➔ Test Case Development
- ➔ Test Environment Setup
- ➔ Test Execution
- ➔ Exit Criteria Evaluation and Reporting
- ➔ Test Closure

7. List 3 advantage/disadvantage of the Waterfall model

Ans.

Advantages:

- ➔ The waterfall model progresses through easily understandable and explainable phases and thus it is easy to use.
- ➔ It is easy to manage due to the rigidity of the model – each phase has specific deliverables and a review process.

➔ In this model, phases are processed and completed one at a time and they do not overlap. The waterfall model works well for smaller projects where requirements are very well understood.

Disadvantages:

➔ It is difficult to estimate time and cost for each phase of the development process.
➔ Once an application is in the testing stage, it is very difficult to go back and change something that was not well-thought out in the concept stage.
➔ Not a good model for complex and object-oriented projects.

8. What do you understand by the term Functional testing?

Ans. **Functional testing** considers the specified behavior and is often also referred to as black-box testing. But it also includes non-functional testing. Testing functionality can be done from two perspectives: requirements-based or business-process-based.

9. Is it true that we can do system testing at any stage?

Ans. No, we can not do system testing at any stage. It can only be after the system is complete.

10. List down the difference between validation and verification processes

Ans.

Verification: The process of evaluating software to determine whether the products of a given development phase satisfy the conditions imposed at the start of that phase. Are we building the product right??

Validation: The process of evaluating software during or at the end of the development process to determine whether it satisfies specified requirements. Are we building the right product?

11. What are stubs and drivers

Ans.

Stub is basically a piece of code that Stub is created by the tester to simulates the activity of missing modules. When high-level modules are being tested and the other modules are not yet created.

Driver: Driver is a piece of code which is created by the tester in place of missing parent module. Test Drivers are the modules that act as a temporary replacement for a calling module(main module) and give the same output as the actual product.

12. Final product or the software cannot be released without passing through the

STLC process - True/False

Ans. True

13. Choose the correct one

a. Testing should start after development

b. Testing should start as early as possible in the software cycle

c. Exhaustive testing is proof of delivering the correct product

d. Testing is context independent

Ans. **b. Testing should start as early as possible in the software cycle**

14. Maintenance testing deals with retesting to show that the rest of the system has

not been affected by the maintenance work – True/False

Ans. True

15. Maintenance testing deals with regression testing to show that the rest of the

system has not been affected by the maintenance work – True/False

Ans. True

16. Unit testing is performed by developers - True/False

Ans. True

17. In V model testing activities are carried out in parallel with development activities

- True/False

Ans. True

18. Static testing include –

a. Inspection, regression, unit testing

b. Retesting, system, End user

c. Review, inspection, Walkthrough

d. Review, inspection, acceptance

Ans. **c. Review, inspection, Walkthrough**

19. Acceptance testing is most often focused on a validation type of testing -

True/False

Ans. True

20. Integration testing focuses on testing different modules all together - True/False

Ans. True