1. Difference between retesting and regression testing?

Ans -

[**Regression** **Testing**](http://www.indiumsoft.com/regression-testing/) is a type of software testing executed to ensure whether a code change/update/release/patch has not unfavourably disturbed current features & functions of an application.

While **Retesting** is a type of testing performed to check whether test cases that were unsuccessful in the final execution are successfully passed after the defects are repaired.

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 is about prevention whereas dynamic testing is about cure.
* Static testing is more cost-effective than dynamic testing.
* Static testing tools provide greater marginal benefits as compared to dynamic testing.
* Static testing gives comprehensive diagnostics for code than dynamic testing.
* Dynamic testing finds fewer bugs as compared to static testing.
* Dynamic testing usually takes longer time as compared to static testing as it tests each case separately.
* Static testing covers more areas than dynamic testing in a shorter time.
* Static testing is done before the code deployment whereas dynamic testing is after the code deployment.
* Static testing is done in verification stage whereas dynamic testing is done in validation stage.
* In static testing code is being examined without being executed whereas In dynamic testing, code is being executed and tested without necessarily being examined.

6. Difference between SDLC & STLC.

Ans -

1. **SDLC** defines all the standard phases which are involved during the software development process, whereas the **STLC** process defines various activities to improve the quality of the product.
2. **SDLC** is a Development Life Cycle whereas **STLC** is a Testing Life Cycle.
3. In **SDLC**, the development team creates the high and low-level design plans while In **STLC**, the test analyst creates the System,Integration Test Plan
4. In **SDLC**, real code is developed, and actual work takes place as per the design documents, whereas in **STLC** testing team prepares the test environment and executes test cases.
5. The **SDLC** life cycle helps a team to complete successful development of the software while **STLC** phases only cover software testing.

7. List 3 advantage/disadvantage of Waterfall model

Ans -

Advantages :-

1. Before the next phase of development, each phase must be completed
2. Suited for smaller projects where requirements are well defined
3. They should perform quality assurance test (Verification and Validation) before completing each stage

Disadvantages :-

1. Error can be fixed only during the phase.
2. It is not desirable for complex project where requirement changes frequently
3. Testing period comes quite late in the developmental process

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

Ans -

**Functional testing** :- It is a type of software testing whereby the system is tested against the functional requirements/specifications. Functions (or features) are tested by feeding them input and examining the output. Functional testing ensures that the requirements are properly satisfied by the application.

During functional testing, [Black Box Testing](http://softwaretestingfundamentals.com/black-box-testing/) technique is used in which the internal logic of the system being tested is not known to the tester.

Functional testing is normally performed during the levels of System Testing and Acceptance Testing.

Typically, functional testing involves the following steps:

* Identify functions that the software is expected to perform.
* Create input data based on the function’s specifications.
* Determine the output based on the function’s specifications.
* Execute the [test case](http://softwaretestingfundamentals.com/test-case/).
* Compare the actual and expected outputs.

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

Ans - No

10. List down difference between validation and verification processes

Ans -

**Validation** is the process of checking whether the specification captures the customer’s needs.

“Did I build what I said I would?”

**Verification** is the process of checking that the software meets the specification.

“Did I build what I need?”

Differences :-

1. **Verification** is a static practice of verifying documents, design, code and program, while **Validation** is a dynamic mechanism of validating and testing the actual product.
2. **Verification** does not involve executing the code, while **Validation** always involves executing the code.
3. **Verification** is human based checking of documents and files, while **Validation** is computer based execution of program.
4. **Verification** uses methods like inspections, reviews, walkthroughs, and Desk-checking etc, while **Validation** uses methods like black box (functional) testing, gray box testing, and white box (structural) testing etc.
5. **Verification** is to check whether the software conforms to specifications, while **Validation** is to check whether software meets the customer expectations and requirements.
6. **Verification** is done by the QA team to ensure that the software is as per the specifications in the SRS document, while **Validation** is carried out with the involvement of the testing team.
7. **Verification** generally comes first-done before **validation**.

11. What are stubs and drivers

Ans -

**Stubs** - Stubs are used to test modules and are created by the team of testers during the process of [Top-Down Integration Testing](https://www.professionalqa.com/top-down-integration-testing). With the assistance of these test stubs testers are capable of stimulating the behaviour of the lower level modules that are not yet integrated with the software. Moreover, it helps stimulate the activity of the missing components.

**Drivers** - Drivers, like stubs, are used by software testers to fulfil the requirements of missing or incomplete components and modules. These are usually more complex than stubs and are developed during the Bottom-Up [approach of Integration Testing](https://www.professionalqa.com/bottom-up-approach). Drivers can be utilized to test the lower levels of the code, when the upper level of codes or modules are not developed. Drivers act as pseudo codes that are mainly used when the stub modules are ready, but the primary modules are not ready.

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 software cycle

c. Exhaustive testing is proof of delivering correct product

d. Testing is context independent

Ans - b. Testing should start as early as possible in 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 - False

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