

Q.1 1) D

2) D

Q.2 1) B

2) B

Q.3 1) D

2) D

Q.4 1) Myths about testing :-

(I) Testing is too expensive.

Pay less for testing during s/w development or pay more for maintainance later. Early testing saves both time & cost in many aspects.

(II) Testing is time-consuming.

during SDLC testing is never time consuming.

(III) only fully developed products are tested

No doubt, testing depends on the source code but reviewing req & developing test cases is independent from developed code.

④ Complete testing is possible

It becomes an issue when a client or tester thinks that complete testing is possible.

⑤ Tested software is bug free

No one can claim with absolute certainty that a s/w app is 100% bug free.

⑥ Missed defects are due to testers

It is not correct approach to blame tester for bugs that remain in the app even after testing.

Q-4 3) Defect life cycle -

Also known as Bug life cycle is the journey of a defect cycle, which a defect goes through during its lifetime.

It varies from organization to organization & also from project to project as it is governed by the s/w testing process & also depends upon the tools used.

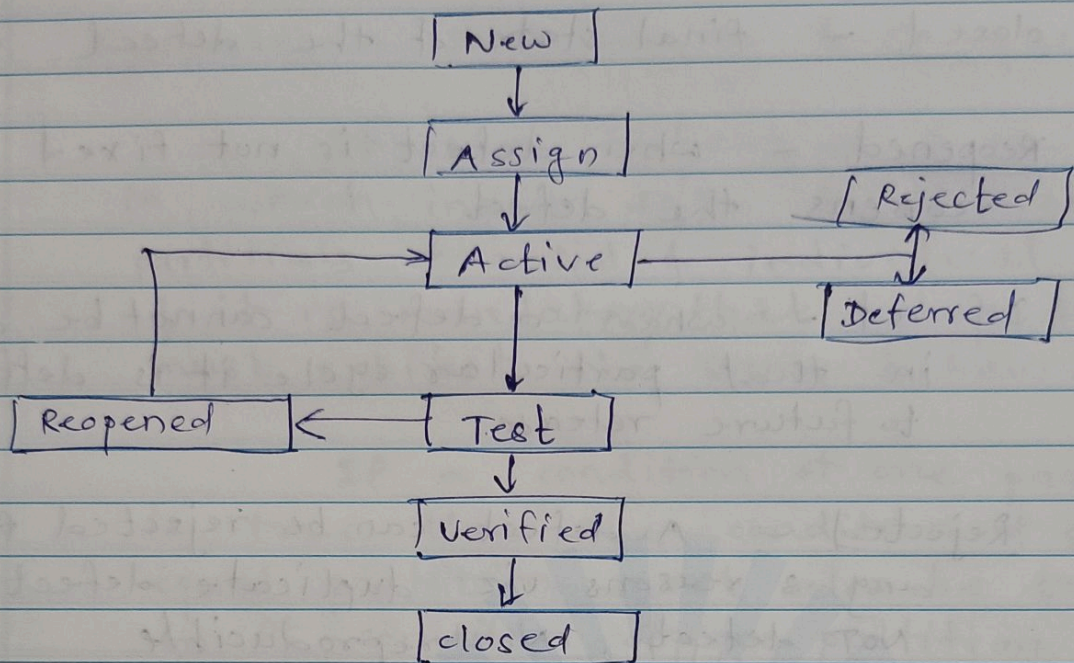


Fig:- Defect life cycle

Defect life cycle states:-

New - Potential defect that is raised & yet to be validated.

Assigned - Assigned against a development team to address it but not yet resolved.

Active - The defect is being addressed by developer & investigation is under progress.

Test - The defect is fixed & ready for testing.

Verified - The defect that is retested & test is verified by QA.

closed - final state of the defect.

Reopened - when defect is not fixed, QA reopens the defect.

Deferred - when a defect cannot be addressed in that particular cycle it is deferred to future release.

Rejected - A defect can be rejected for any 3 reasons viz duplicate defect, NOT defect, Non reproducible.

Q.51)

Verification

Validation

- | | |
|--|--|
| <p>① It includes checking docs, design, code & programs</p> | <p>① It includes testing & validating actual product.</p> |
| <p>② It is static testing</p> | <p>② It is dynamic testing</p> |
| <p>③ It does not include execution of code</p> | <p>③ It include execution of code.</p> |
| <p>④ In this reviews, walkthrough, inspections & desk checking methods are used.</p> | <p>④ In this black box testing, white box testing & non functional testing methods are used.</p> |
| <p>⑤ QA team does verification</p> | <p>⑤ Testing team does validation</p> |
| <p>⑥ It comes before validation</p> | <p>⑥ It comes after verification</p> |

Q.5 2)

Equivalence partitioning technique:-

It is a technique of s/w testing in which input data is divided into partitions of valid & individual values & it is mandatory that all partitions must exhibit the same behavior.

If a condition of one partition is true then the condition of another equal partition must also be true, & if condition of one partition is false then for another also false.

The principle of equivalence partitioning is, test cases should be designed to cover each partition at least once. Each value of every equal partition must exhibit the same behavior as other.

eg. Assume that there is a function of a s/w applⁿ that accepts a particular number of digits, not greater & less than that particular no. for example an OTP no. which contains only six digits, less or more than six digits will not be accepted & the applⁿ will redirect the user to error page.

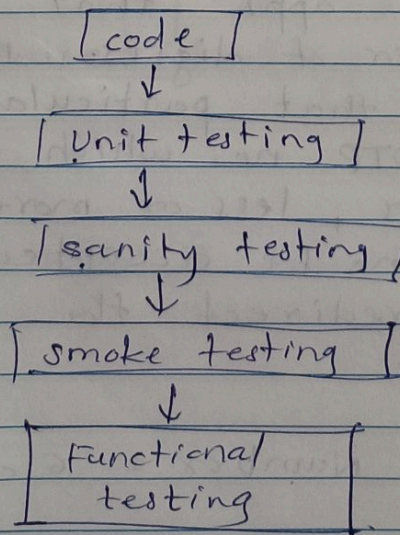
OTP Number = 6 digits.

Invalid Test case 1	Invalid test case 2	Valid test case 3	Valid, test case 4
Digits ≥ 11	Digits ≤ 9	Digits = 10	Digits = 10
9 3 8 4 7 2 6 2 2 1 9	9 8 4 5 4 3 9 8 5 2	9 9 9 1 4 5 7 2 3 4	9 8 9 3 4 5 1 4 8 3

Q.6 1) Smoke testing :-

It is a s/w testing process that determines whether the deployed s/w builds is stable or not.

smoke testing is a confirmation for QA team to proceed with further s/w testing. It consists of a minimal set of tests run on each build to test s/w functionalities. It is also known as "Build verification testing" or "Confidence testing".



sanity testing -

It is a subset of regression testing. After receiving the s/w build, sanity testing is performed to ensure that the code changes introduced are working as expected. This testing is a checkpoint to determine if testing for the build can proceed or not.

The main purpose of this testing is to determine that the changes or the proposed functionality are working as expected.

If the sanity test fails, the build is rejected by the testing team to save time & money. It is performed only after the build has cleared the QA team for further testing. The focus of the team during this testing process is to validate the functionality of the application & not detailed testing.

Q.6 3) Security testing -

It is a type of s/w testing that involves the vulnerabilities of the system & determines that the data & resources of the system are protected from possible

intruders. It ensures that the o/w system & application are free from any threats or risks that can cause a loss.

Goal of security testing -

- To identify the threats in the system
- To measure potential vulnerabilities of system
- To help in detecting every possible security risks in system.
- To help developers in fixing the security problems through coding.

principle of security testing:-

- confidentiality
- Integrity
- Authentication
- Authorization
- Availability
- Non-repudiation

Types of security testing -

- Vulnerability scanning
- Security scanning
- Penetration testing
- Risk assessment
- security auditing
- Ethical hacking
- posture assessment.