**MANUAL TESTING CONCEPTS**

1. Defect life cycle is a cycle which a defect goes through during its lifetime. It starts when defect is found and ends when a defect is closed, after ensuring it’s not reproduced. Defect life cycle is related to the bug found during testing. New, Assigned, Open, Fixed, Pending reset, Retest, Verified, Reopen, Closed, Duplicate, Rejected, Deferred, Not a bug.
2. Load testing is testing that checks how systems function under a heavy number of concurrent virtual users performing transactions over a certain period of time. Performance testing is the general name for tests that check how the system behaves and performs. Performance testing examines responsiveness, stability, scalability, reliability, speed and resource usage of your software and infrastructure.
3. Load testing, Performance testing, Compatibility testing, Security testing, Reliability testing, Stress testing and Usability testing.
4. We have to log the details of a bug and pass it to developer. We have to mention the details like Issue ID, Summary, Description, Screenshot, Priority, Type of Issue.
5. Inform the team and log the defect as high severe defect and assign immediately to the concerned developer.
6. 3-Point Software Testing Estimation Technique, Use – Case Point Method, Work Breakdown Structure, Wideband Delphi technique, Function Point/Testing Point Analysis, Percentage of development effort method, Percentage distribution, Best Guess.
7. By referring the design document, we can know the functionality.
8. We do sanity testing to check the basic functionality.
9. Metric is a quantitative measure of the degree to which a system, system component, or process possesses a given attribute.

Examples: How many defects are existed within the module? How many test cases are executed per person? What is the Test coverage %?

Measurement is the quantitative indication of extent, amount, dimension, capacity, or size of some attribute of a product or process.

Example: Total number of defects.

1. Boundary Value Analysis, Equivalent Class Partitioning, Use case, Error tracking, Defect tracking.
2. Quality Center, Jiira, Bugzilla, Rally.
3. Development, Testing, Staging, Production environments.
4. Agile methodology promotes continuous improvement, and encourages rapid and flexible response to change by conducting scrum meetings during every phase of SDLC.
5. Alpha testing is simulated or actual operational testing by potential users/customers or an independent test team at the developers’ site. Alpha testing is often employed for off-the-shelf software as a form of internal acceptance testing, before the software goes to beta testing.

In software development, a beta test is the second phase of software testing in which a sampling of the intended audience tries the product out.

1. A burn down chart is a graphical representation of work left to do versus time. The rate of progress of a Scrum Team is called "velocity". While calculating velocity, stories that are completed at the end of the iteration are counted.
2. Discusses about individual tasks assigned.
3. Error in an application is known as defect.
4. Development environment is the set of processes and programming tools used to create the program or software product.
5. Entry criteria is Base lined RTM, Test Plan, Test case/scripts are available. Test environment is ready. Test data set up is done. Unit/Integration test report for the build to be tested is available.

In Exit criteria, all tests planned are executed. Defects logged and tracked to closure.

1. To test the application after combining 2 or more modules together for the correctness of the output.
2. I never got a chance to test an application.
3. Severity of a defect is related to how severe a bug is. Usually the severity is defined in terms of financial loss, damage to environment, company's reputation and loss of life. Priority of a defect is related to how quickly a bug should be fixed and deployed to live servers.
4. In Scrum, a product backlog item is a unit of work small enough to be completed by a team in one Sprint iteration. Backlog items are decomposed into one or more tasks.
5. A production environment is where the Wave set application is actually available for business use.
6. A QA environment is where you test your upgrade procedure against data, hardware, and software that closely simulate the Production environment and where you allow intended users to test the resulting Wave set application.
7. Requirement Traceability Matrix or RTM captures all requirements proposed by the client or development team and their traceability in a single document delivered at the conclusion of the life-cycle. In other words, it is a document that maps and traces user requirement with test cases.
8. Scrum methodology is a subset of agile method.
9. Software Development Life Cycle. Different phases of SDLC are Requirements gathering, Analysis, Design, Implementation, Testing, Deployment and Maintenance.
10. Product backlog grooming in reference to keeping the backlog clean and orderly—is a meeting that is held near the end of one sprint to ensure the backlog is ready for the next sprint.
11. To discuss the tasks to be performed on that day.
12. The sprint retrospective is a meeting facilitated by the Scrum Master at which the team discusses the just-concluded sprint and determines what could be changed that might make the next sprint more productive.
13. To discuss about the performed tasks that day.
14. A stage or staging environment is an environment for testing that exactly resembles the production environment. In other words, it's a complete but independent copy of the production environment, including the database. Staging provides a true basis for QA testing because it precisely reproduces what is in production.
15. Software Testing Life Cycle (STLC) is defined as a sequence of activities conducted to perform Software Testing. It consists of series of activities carried out methodologically to help certify your software product.
16. Test-driven development (TDD) is a software development process that relies on the repetition of a very short development cycle: requirements are turned into very specific test cases, then the software is improved to pass the new tests, only.
17. Set of conditions used by the tester to test the correctness of the application or its features.
18. A Test Plan Document is the strategy that will be used to verify and ensure that a product or system meets its design specifications and other requirements. The Test Strategy document describes the scope, approach, resources and schedule for the testing activities of the project.
19. It contains sprint and scrum meetings to discuss the change of requirements, what work has to be done etc
20. User acceptance testing (UAT) is the last phase of the software testing process. During UAT, actual software users test the software to make sure it can handle required tasks in real-world scenarios, according to specifications.
21. Unit testing is a type of testing performed by the deveoper. After developing the code, developer tests the code whether it is working or not.
22. Acceptance Criteria are the conditions that a software product must satisfy to be accepted by a user, customer, or in the case of system level functionality, the consuming system.
23. Team member is responsible for his work and answerable to his team about his work. This is user story.
24. It is one of the models of SDLC. It is known as Verification and Validation model. All the processes executes in sequential manner in V-shape.
25. All the phases of the SDLC process are in a sequential order like a waterfall. It would be difficult to modify any phase after it has been done.
26. Testers do not participate in every phase of SDLC; they do participate in testing phase.
27. Desktop, enterprise, web service, mobile applications.
28. Inform to manager or lead immediately.
29. We do sanity testing to check the basic functionality.
30. According to business requirements.
31. To test the application after combining 2 or more modules together for the correctness of the output.
32. Regression testing is a type of software testing that verifies that software previously developed and tested still performs correctly even after it was changed or interfaced with other software. Changes may include software enhancements, patches, configuration changes, etc.
33. Smoke Testing, also known as “Build Verification Testing”, is a type of software testing that comprises of a non-exhaustive set of tests that aim at ensuring that the most important functions work. The results of this testing is used to decide if a build is stable enough to proceed with further testing. Sanity Testing is the subset of Regression Testing and it is performed when we do not have enough time for doing testing. Sanity testing is the surface level testing where QA engineer verifies that all the menus, functions, commands available in the product and project are working fine.
34. Black-box testing is a method of software testing that examines the functionality of an application. This method of test can be applied to virtually every level of software testing: unit, integration, system and acceptance.
35. Team Lead or Manager will assign the work to be performed.
36. To ensure the correctness and quality of a application / product.
37. Test case examples:

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| Test Case ID | Test Scenario | Test Steps | Expected Result |
| TU1 | Check customer sign up with valid data | Go to site  Enter Username  Enter Password  Enter Confirm password  Click Submit | Customer should sign in successfully |
| TU2 | Check customer sign up with in-valid data | Go to site  Enter Username  Enter Password  Enter Confirm password  Click Submit | Customer should not be able to sign in |
| TU3 | Verify the input field that can accept maximum of 8 characters | Login to application and key in 5 characters | Application should accept input. |
| TU4 | Verify the input field that can accept maximum of 8 characters | Login to application and key in 10 characters | Application should not accept input. |