1. **Why testing is required?**

* **To increase the reliability and quality of the software.**
* **Effective performance of software application or product.**

**2. What type of applications we test?**

**We test web applications and mobile applications.**

**3. What is SDLC? Different phases in SDLC?**

**The software development life cycle (SDLC) is a framework defining tasks performed at each step in the software development process.**

1. **Requirement gathering and analysis**
2. **Design**
3. **Implementation or coding**
4. **Testing**
5. **Deployment**
6. **Maintenance**

**4. What is waterfall method?**

**In a waterfall model, each phase must be completed fully before the next phase can begin.. At the end of each phase, a review takes place to determine if the project is on the right path and whether or not to continue or discard the project. In this model** [**software testing**](http://istqbexamcertification.com/what-is-a-software-testing/) **starts only after the development is complete.**

**Phases in Waterfall Model-**

* **Requirements**
* **Analysis**
* **Design**
* **Implementation**
* **Testing**
* **Deployment**
* **Maintenance**

**5. What is agile methodology?**

**The Agile Method is a particular approach to project management that is utilized in software development. This method assists teams in responding to the unpredictability of constructing software. It uses incremental, iterative work sequences that are commonly known as sprints.**

**6. What is scrum methodology?**

**Scrum is an iterative and incremental** [**agile software development**](https://en.wikipedia.org/wiki/Agile_software_development) **framework for managing product development.**

**7. What is the process in agile model?**

**The** [**Agile methodology**](https://alpha.wrke.io/project-management-guide/glossary/#agile) **begins with clients describing how the end product will be used and what problem it will solve. This clarifies the customer’s expectations to the project team. Once the work begins, teams cycle through a process of planning, executing, and evaluating — which might just change the final deliverable to fit the customer’s needs better.**

**8. What is daily stand-up meeting and what we discuss?**

**Also known as a daily scrum, a 15-minute mini-meeting for the software team to sync. The whole team meets every day for a quick status update. We discuss things**

1. **What did you do yesterday?**
2. **What will you do today?**
3. **Are there any impediments in your way?**

**9.What is product back log items?**

**The "Product backlog Item" is indeed the What, the functionality that needs to be built. The Task describes the steps that need to be taken to get there.**

**10. what is user story/feature/sprint back log items and tasks in user story?**

* **A Story is a *what* that can fit in a single sprint**
* **A Feature is a *what* that can't fit in a sprint but can fit in a release**
* **A Task is about the *how* and noone other than the team should be concerned with them**

**11. what is sprint planing meeting?**

**A team planning meeting that determines what to complete in the coming sprint.**

**12. what is sprint retrospective?**

**A review of what did and didn't go well with actions to make the next sprint better.**

**15. what is user acceptance criteria test cases?**

**User Acceptance Testing (UAT) involves running a product through a series of specific tests which determines whether the product will meet the needs of its users.**

**16. what is v model?**

**The V - model is SDLC model where execution of processes happens in a sequential manner in V-shape. It is also known as Verification and Validation model. V - Model is an extension of the waterfall model and is based on association of a testing phase for each corresponding development stage.**

**17. what is STLC?**

**Software Testing Life Cycle is a testing process which is executed in a sequence, in order to meet the quality goals. It is not a single activity but it consists of many different activities which are executed to achieve a good quality product.**

**18. what is defect?**

**A Software Defect is a condition in a software product which does not meet a software requirement or end-user expectations In other words, a defect is an error in coding or logic that causes a program to malfunction or to produce incorrect/unexpected results.**

**19. How to arise a defect and what we specify while logging defect?**

**20. defect lifecycle?**

* **New - Potential defect that is raised and yet to be validated.**
* **Assigned - Assigned against a development team to address it but not yet resolved.**
* **Active - The Defect is being addressed by the developer and investigation is under progress. At this stage there are two possible outcomes; viz - Deferred or Rejected.**
* **Test - The Defect is fixed and ready for testing.**
* **Verified - The Defect that is retested and the test has been verified by QA.**
* **Closed - The final state of the defect that can be closed after the QA retesting or can be closed if the defect is duplicate or considered as NOT a defect.**
* **Reopened - When the defect is NOT fixed, QA reopens/reactivates 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 of them**

**21. What is unit testing?**

**Unit Testing is a** [**level of software testing**](http://softwaretestingfundamentals.com/software-testing-levels/) **where individual units/ components of a software are tested. The purpose is to validate that each unit of the software performs as designed.**

**22. when do we use regression testing?**

**Regression testing means rerunning test cases from existing test suites to build confidence that software changes have no unintended side-effects. The “ideal” process would be to create an extensive test suite and run it after each and every change.**

**23. What is integration testing?**

**In Integration Testing, individual software modules are integrated logically and tested as a group.**

**A typical software project consists of multiple software modules, coded by different programmers.**

**Integration testing focuses on checking data communication amongst these modules.**

**24. when do we use integration testing?**

**code blocks of different functionality are combined, they need to be tested. This is when we use integration testing.**

**25. when do we use smoke testing and sanity testing?**

**Smoke Testing: Software Testing done to ensure that whether the build can be accepted for through software testing or not. Basically, it is done to check the stability of the build received for software testing.**

**Sanity testing: After receiving a build with minor changes in the code or functionality, a subset of regression test cases are executed that to check whether it rectified the software bugs or issues and no other software bug is introduced by the changes. Sometimes, when multiple cycles of regression testing are executed, sanity testing of the software can be done at later cycles after through regression test cycles.**

**27. what is UAT?**

**UAT: User Acceptance Testing (UAT) involves running a product through a series of specific tests which determines whether the product will meet the needs of its users.**

**28. what is alpha and beta testing?**

**Alpha testing- Pre-release testing by end user representatives at the developer's site.**

**Beta testing - Testing performed by potential customers at their own locations.**

**29. when do we use white box testing and block box testing?**

* **White box testing is investigation of the internals of software - logic, code structure, code modules (units). More here:** [**Albert Gareev's answer to What is white box testing?**](https://www.quora.com/What-is-white-box-testing/answer/Albert-Gareev)
* **Black box testing is investigation of software out of the box - as a product in a context.**

**30. what we will do if we don't have a time to test all stories/ execute test cases?**

* **Test cases should be executed according to their priority.**
* **Main functionalities must be tested**

**31. what we will do if come across any critical severity issue before release day?**

**Issue related element must be disabled and should be released.**

**32. when do we use automation testing?**

**Manually repeating these tests is costly and time consuming. Once created,automated tests can be run over and over again at no additional cost and they are much faster than manual tests. Automated software testing can reduce the time to run repetitive tests from days to hours.**

**33. what tester will do in each phase of SDLC?**

**SDLC- Software Development LiFe Cycle**

**it contains 6 Phases**

**1)Gathering Software Requirement**

**2)Software Design and Analysis**

**3)Coding**

**4)Testing**

**5)Implementation**

**6)Maintainance**

**in every phase Software Tester is involved.**

**34. difference between load and performance testing?**

* ***Performance Testing is testing conducted to evaluate the compliance of a system or component with specified performance requirements.***
* ***Stress Testing is testing conducted to evaluate a system or component at or beyond the limits of its specified requirements.***

**35. different types of non-functional testing types?**

* **Load/Performance testing.**
* **Compatibility testing.**
* **Localization testing.**
* **Security testing.**
* **Reliability testing.**
* **Stress testing.**
* **Usability testing.**
* **Compliance testing.**

**36. what is test case?**

**A test case is a set of conditions or variables under which a tester will determine whether a system under test satisfies requirements or works correctly.The process of developing test cases can also help find problems in the requirements or design of an application.**

**37. what is test planning/test strategy document?**

**Test Plan is a formal document that describes our strategy or approach of testing the software.**

* **Creation is essential for Effective Testing.**
* **Should consume about 1/3 of total Test Efforts.**
* **If the plan is developed carefully, Test Execution, analysis and reporting activities will run smoothly.**

**38. what is Exit and Entry criteria ?**

**Entry Criteria:**

**The prerequisites that must be achieved before commencing the testing process.**

**Exit Criteria:**

**The conditions that must be met before testing should be concluded.**

**39. what is TDD and BDD (cucumber framework)?**

**TDD: TDD or Test-Driven Development is a process for when you write and run your tests. Following it makes it possible to have a very high test-coverage. Test-coverage refers to the percentage of your code that is tested automatically, so a higher number is better.**

**BDD: BDD – Behavior-Driven Development – is perhaps the biggest source of confusion. When applied to automated testing, BDD is a set of best practices for writing great tests. BDD can, and should be, used together with TDD and unit testing methods.**

**40. how do we write test cases in BDD format?**

**41. what is priority and severity in defect?**

**Severity: It is the measure of seriousness/danger of the issue. Something that may cause you software to crash or a security breach or basic functionality not working are all kind of very high severity issues.**

**Priority: It defines how quickly the issue needs to be fixed. A high priority issue means that it should be fixed immediately.**

**41. how to estimate test cases?**

* **3-Point Software Testing Estimation Technique**
* **Use-Case Point Method and**
* **Wide Band Delphi Method**

**42. what is most challenge defect u came across?**

**Software Testing has lot of challenges both in manual as well as in automation. Generally in manual testing scenario developers through the build to test team assuming the responsible test team or tester will pick the build and will come to ask what the build is about? This is the case in organizations not following so-called ‘processes’. Tester is the middleman between developing team and the customers, handling the pressure from both the sides.**

**43. what are test design techniques?**

**Test Design is creating a set of inputs for given software that will provide a set of expected outputs.**

**There are two main categories of Test Design Techniques. They are:**

1. [**Static Techniques**](http://istqbexamcertification.com/what-is-static-testing-technique/)
2. [**Dynamic Techniques**](http://istqbexamcertification.com/what-is-dynamic-testing-technique/)

**44. if we dont have time to test call test cases what we will do?.**

* **Test cases should be executed according to their priority.**
* **Main functionalities must be tested**

**46.what are the tools to manage defects/stories?**

* **Bugzilla**
* **Jira**
* **Mantis**
* **ReadMine**
* **Trac**

**47. who will assign the work?**

**Generally test lead assign the work to test engineer. It**

**depends on the organisation where Test lead and Test**

**enginerrs combindly may start the process based on SRS and**

**DDD**

**48. what is requirement traceability matrix?**

**Requirements tracing, a process of documenting the links between the requirements and the work products developed to implement and verify those requirements. The RTM captures all requirements and their traceability in a single document delivered at the conclusion of the life cycle.**

**50. what are different defect metrics and measurements we prepare in testing?**

***A Metric is a quantitative measure of the degree to which a system, system component, or process possesses a given attribute.***

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

**51. what is development environment?**

**A development environment is a collection of procedures and tools for developing, testing and debugging an application or program.**

**52. what is QA environment?**

**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 Waveset application**

**53. What is staging environment?**

**In software, a staging environment is used to test out newer versions of software before it is moved live – into production.**

**54. what is production environment?**

**A production environment is where the real-time staging of programs that run an organization are executed, and includes the personnel, processes, data, hardware, and software needed to perform day-to-day operations.**

**55. how to deal the production defects?**

* **Accepting any defects that remain in finished goods**
* **Identify and address issues with product inspection**
* **Manage expectations for allowable defects**