**Module–2(Manual Testing)**

1. What is Exploratory Testing?

* Exploratory testing is concurrent process where test design, execution and login happen simultaneously.

1. What is traceability matrix?

* A document that track the relationship between requirement and test case.

1. What is Boundary value testing?

* BVA is a software testing technique where test cases are designed to include values that represent the boundaries of input parameters, such as minimum, maximum, and edge values.

1. What is Equivalence partitioning testing?

* Aim is to treat groups of inputs as equivalent and to select one representative input to test them all.

1. What is Integration testing?

* Integration testing is process of joining different units of software are tested as a combine entity.

1. What determines the level of risk?

* Mainly two types of risk 1. Product and 2. Project

1. What is Alpha testing?

* It is performed by the developers at the software development site.

1. What is beta testing?

* It is performed by the customers at their own site.

1. What is component testing?

* A unit is the smallest testable part of software it is also known as unit testing, module testing.

10. What is functional system testing?

* A requirement that specifies a functional that a system or system component must perform.

11. What is Non-Functional Testing?

* Testing the attributes of a component or system that do not relate to functionality.

12. What is GUI Testing?

* Graphical user interface(GUI) testing is the process of testing it button, icons, and all types of bar like tool bar, menu bar, dialog box, and windows etc.

13. What is Ad hoc testing?

* Ad hoc testing is an informal testing type with an aim to break the system.

14. What is load testing?

* It’s a performance testing to check system behaviour under load.

15. What is stress Testing?

* Determines the strength of software by testing beyond the limits of normal operation.

16. What is white box testing and list the types of white box testing?

* testing based on the analysis of the internal structure of the system

Types of White box testing:

1. statement coverage

2. decision coverage

3. condition coverage

17. What is black box testing? What are the different black box testing techniques?

* Black box testing either functional or non-functional without reference to the internal structure of system or component.

Techniques of black box testing:

1. Equivalence partitioning
2. Boundary value analysis
3. Decision tables
4. State transition testing

18. Mention what are the categories of defects?

* Database defects

2. Critical functionality defects

3. Functionality defects

4. Security defects

5. User interface defects.

19. Mention what big bang testing is?

* A types of integration testing all components all the modules or components of a system into a single unit and tests them as a whole.

20. What is the purpose of exit criteria?

* Software testing teams will use exit criteria to determine if a test plan or project can exit to the next stage or be considered complete.

21. When should "Regression Testing" be performed?

* Whenever there are changes to the software codebase, including new features, bug fixes, code refactoring, performance improvements, or environment changes.

22. What is 7 key principles? Explain in detail?

* 1. Testing shows presence of defect:- testing shows that defects are present but cannot prove that there is no defect.

2. Exhaustive testing is impossible:- testing everything including all combinations of inputs and preconditions is not possible.

3. Early testing:- The practice of starting testing activities as soon as possible in the software development lifecycle(SDLC).

1. Defect clustering:- A non- uniform distribution of defect throughout the application.
2. The pesticides paradox:-When the same test are repeatedly run against software but new bugs are not founded.
3. Testing is context dependent:- The testing depends on the project’s description.
4. Absence of error fallacy:- when any functionality is not working properly and does not match the customers satisfaction and needs then there is no meaning of the building system.

23. Difference between QA v/s QC v/s Tester

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| --- | --- | --- |
| QA | QC | Tester |
| QA means quality assurance | QC means quality control | Tester means tester |
| QA is subset of  (STLC) | QC is subset of  QA | Tester is subset of QC |
| Preventive activities | Corrective process | Preventive process |
| Process oriented activities | Product oriented activities | Product oriented activities |
|  |  |  |

24. Difference between Smoke and Sanity?

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| --- | --- |
| Smoke | Sanity |
| Smoke testing is performed after software build to ascertain that the critical functionality of the program is worked fine | Sanity means with minor changes in code or functionality and fixing of the bugs and no further issues are introduced |
| Smoke is done by developers and tester | Sanity is done by only tester |
| Smoke is unscripted | Sanity is scripted |
| Smoke is used to verify stability | Sanity is used to verify rationality |
| Ex:- general health check up | Ex:- like specialized check up |

25. Difference between verification and Validation

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| --- | --- |
| Verification | Validation |
| Verification has worked in up to down approach | Validation has worked in bottom to up approach |
| Verification phases is also known as developer level | Validation phases is also known as test level |
| Before the part of coding is known as verification | After the part of coding is known as validation |
| Identify and fix errors early | Ensure the product meets user needs |
| Verification is done by the developer | Validation is done by the tester |

26. Explain types of Performance testing.

* Load testing

Stress testing

Endurance testing

Spike testing

Volume testing

Scalability testing

* Explain types of performance testing

Load testing:- it’s a performance testing to check system behaviour under the load.

Stress testing:- determines the strength of software by testing beyond the limits of normal operation.

27. What is Error, Defect, Bug and failure?

* Error:- A mistake in coding is called error.

Defect:- Error found by the tester it is known as defect.

Bug:- Defect accepted by developer team then it is called bug.

Failure:- build does not meet the requirements then it is failure.

28.Difference between Priority and Severity

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| --- | --- |
| Priority | Severity |
| How soon the bug should be fixed | Severity means the seriousness of the defect in the product functionality  Or  Importance of defect |
| Priority means the business focused | Severity means the customer focused |
| Category decided by tester | Category decided by developers or product owners. |
| Deal with the technical aspects of the application. | Deal with the timeframe or order to fix the defects |
|  |  |

29.What is Bug Life Cycle?

* A cycle of defects in which it goes through different states throughout its life.

30. Explain the difference between Functional testing and Non Functional testing

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| --- | --- |
| Functional | Non-Functional |
| Testing based on analysis of the specification of the functionality of a computer or system | Testing the attributes of company or system that do not relate to functionality |
| Easy to do manual testing | Though to do manual testing |
| Functional testing is executed first | Non- function testing should be performed after functional testing |
| Types:- unit testing, smoke testing, sanity testing | Types:- load testing, stress testing, performance testing |
| Automation tool can be used for manual testing | Using tool for testing is effective for testing |

31. What is the difference between the STLC (Software Testing Life Cycle) and SDLC (Software Development Life Cycle)?

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| --- | --- |
| STLC | SDLC |
| STLC is mainly related to software testing. | SDLC is mainly related to software development. |
| STLC involves only five phases or steps. | SDLC involves total six phases or steps. |
| It helps in making the software defect free | It helps in developing good quality software. |
| STLC phase are performed after SDLC phases. | SDLC phases are completed before the STLC phases |
| In STLC, less number of members (testers) are needed. | In SDLC, more number of members (developers) are required for the whole process. |

32. What is the difference between test scenarios, test cases, and test script?

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| Test scenario | Test case | Test script |
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33.Explain what Test Plan is? What is the information that should be covered.

* A document that describe the scope, approach, resources and scheduled of intended testing activities.

Test planning

Test planning factors

Test planning activity

Test planning strategies

Exit criteria

34.What is priority?

* how soon the bugs should be fixed it is known as the priority

35. What is severity?

* the seriousness of the defect in the product functionality it is known as the severity

36. Bug categories are…

* functionality (critical/gernal), performance, security, security, database, UI

38.Advantage of Bugzilla.

39. Difference between priority and severity

* same as question no 28.

40. What are the different Methodologies in Agile Development Model?

* individual interaction

Working software

Customer collaboration

Responding into change

41. Explain the difference between Authorization and

Authentication in Web testing. What are the common problems faced in Web testing?