Module–2(Manual Testing)

1• What is Exploratory Testing?

Ans -

This may be the only type of technique used for **low-risk systems**, but this approach may be particularly useful under extreme time pressure – in fact this is **one of the factors leading to exploratory testing**.

2• What is traceability matrix?

Ans **-**

To protect against changes, you should be able to **trace back from every system component** to the original requirement that caused its presence.

A **software process** should help you keeping the virtual table up-to-date.

Simple technique may be quite valuable (naming convention)

3• What is Boundary value testing?

Ans- Boundary value analysis is a methodology for designing test cases that concentrates software testing effort on cases near **the limits of valid**

ranges Boundary value analysis is a method which **refines** equivalence partitioning.

Boundary value analysis generates test cases that highlight errors better than equivalence partitioning.

The trick is to concentrate software testing efforts at the extreme ends of the equivalence classes.

4• What is Equivalence partitioning testing?
Ans - The techniques of equivalence partitioning and boundary value analysis are
often applied to specific situations or inputs.
However, if different combinations of inputs result in different actions being
taken, this can be more difficult to show using equivalence partitioning and
boundary value analysis, which tend to be more focused on the user interface.
The other two specification-based software testing techniques, decision
tables and state transition testing are more focused on business logic or business rules.
A decision table is a good way to deal with combinations of things (e.g. inputs).

5 • What is Integration testing?

Ans - **System Integration Testing is testing between the 'System' and 'Acceptance' phases.** ↔

The System has already proven to be functionally correct, what remains to be tested is how the system reacts to other systems and/or organisations.

6• What determines the level of risk?

Ans - A properly designed test that passes, reduces the overall level of Risk in a system ↔

Risk – '**A factor that could result in future negative consequences; usually expressed as impact and likelihood**' ↔

When testing does find defects, the Quality of the software system increases when those defects are

7 • What is Alpha testing?

Ans - Alpha Testing is definitely performed and carried out at the developing organizations location with the involvement of developers.

It comes under the category of both White Box Testing and Black Box Testing.

8.What is beta testing?

Ans - It is always performed by the customers at their own site.

It is not performed by Independent Testing Team.

Beta Testing is always open to the market and public.

It is usually conducted for software product.

It is performed in Real Time Environment.

It is always performed outside the organization.

9. What is component testing?

Ans- **Component(Unit) – A minimal software item that can be tested in isolation. It means "A unit is the smallest testable part of software."**

Component Testing – The testing of individual software components.

Unit Testing is a level of the software testing process where **individual units/components of a software/system** are tested. The purpose is to validate that each unit of the software performs as designed.

10 What is functional system testing?

Ans- Functional Testing using Black Box Testing techniques against the interfacing requirements for the component under test

11. What is Non-Functional Testing?

Ans- Non-Functional Testing: Testing the attributes of a component or system that do not relate to functionality, e.g. reliability,
efficiency, usability, interoperability, maintainability and portability

12 .What is GUI Testing?
Ans - Check all the GUI elements for size, position, width, length and acceptance of characters or numbers. For instance, you must be able to provide inputs to the input fields.
Check you can execute the intended functionality of the application using the GUI
Check Error Messages are displayed correctly
Check for Clear demarcation of different sections on screen
Check Font used in application is readable
Check the alignment of the text is proper
13.What is Adhoc testing?
Ans - Adhoc testing is an informal testing type with an aim to break the
system.
It does not follow any test design techniques to create test cases.
In fact is does not create test cases altogether!
This testing is primarily performed if the knowledge of testers in the
system under test is very high.

14.What is load testing?
Ans- Its a performance testing to check system behavior under load.
Testing an application under heavy loads, such as testing of a web site under a
range of loads to determine at what point the system's response time degrades or fails.
Load testing is a kind of performance testing which determines a system's performance under real-life load conditions. This testing helps determine how the application behaves when multiple users access it simultaneously.
15 . What is stress Testing?
Ans- Stress testing is used to test the stability & reliability of the system.
This test mainly determines the system on its robustness and error handling under extremely heavy load conditions.
16 .What is white box testing and list the types of white box testing?
Ans- White Box Testing: Testing based on an analysis of the internal
structure of the component or system.
Structure-based testing technique is also known as 'white-box'
or 'glass-box' testing technique because here the testers require knowledge of how the software is implemented, how it works.
In white-box testing the tester is concentrating on how the software does it.

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

Ans - Black-box testing: Testing, either functional or non-functional,
without reference to the internal structure of the component or system.
There are four specification-based or black-box technique:

- Equivalence partitioning
- Boundary value analysis
- Decision tables
- State transition testing
- Use-case Testing
- Other Black Box Testing

18 .Mention what are the categories of defects?
Ans -Defect is the variance from a desired product attribute (it can be a
wrong, missing or extra data).

- It can be of two types –
- Defect from the product or a variance from customer/user expectations.
- It is a flaw in the software system and has no impact until it affects the
user/customer and operational system.

19.Mention what big bang testing is?
Ans - In Big Bang integration testing all components or modules isintegrated simultaneously, after which everything is tested as a whole.
Big Bang testing has the advantage that everything is finished before integration testing starts.
20.What is the purpose of exit criteria?
Ans - Successful Testing of Integrated Application.
Executed Test Cases are documented
All High prioritized bugs fixed and closed
Technical documents to be submitted followed by release
21.When should "Regression Testing" be performed?
Ans- Regression Testing: Testing of a previously tested program following modification to ensure that defects have not been introduced or uncovered in unchanged areas of the software, as a result of the changes made. It is performed when the software or its environment is changed.
If the test is re-run and passes you cannot necessarily say the fault has
been resolved because .
22.What is 7 key principles? Explain in detail?
Ans - General Testing Principles
1. Testing shows presence of Defects
2. Exhaustive Testing is Impossible!
3. Early Testing
4. Defect Clustering
5. The Pesticide Paradox
6. Testing is Context Dependent

7. Absence of Errors Fallacy

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

Ans- QA Tester work

1. Activities which ensure the implementation of processes,
procedures and standards in context to verification of developed software and intended requirements.
2. Focuses on processes and
procedures rather than conducting
actual testing on the system.
3. Process oriented activities.

QC

1. Activities which ensure the verification of developed,software with respect to documented (or not in some cases) requirements.
2. Focuses on actual testing by executing Software with intend
3.Product oriented activities.

24.Difference between Smoke and Sanity?

Ans- Smoke and Sanity testing are the most misunderstood topics in Software Testing. There is enormous amount of literature on the subject, but

most of them are confusing. The following article makes an
attempt to address the confusion.

After receiving a software build, with minor changes in code, or
functionality, Sanity testing is performed to ascertain that the bugs have been fixed and no further issues are introduced due to these changes.

25.Difference between verification and Validation
Ans- Definition for Verification The process of evaluating
work-products (not the actual
final product) of a development phase to determine whether
they meet the specified
requirements for that phase.

Definition for The process of evaluating software during
or at the end of the development
process to determine whether it.

satisfies specified business
requirements.

26.Explain types of Performance testing.

Ans- Software performance testing is a means of quality assurance (QA). It involves testing software applications to ensure they will perform well under their expected workload.

Features and Functionality supported by a software system is not the
only concern. A software application's performance like its response time, do matter. The goal of performance testing is not to find bugs but
to eliminate performance bottlenecks

Types of Performance Testing

- Load testing
- Stress testing
- Endurance
testing
- Spike testing
- Volume testing
- Scalability testing

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

Ans- Failure: The inability of a system or component to perform its required functions within specified performance requirements. See:
bug, crash, exception, and fault.

- Bug: A fault in a program which causes the program to perform in an
unintended or unanticipated manner. See: anomaly, defect, error,
exception, and fault. Bug is terminology of Tester.
- Defect: Commonly refers to several troubles with the software
products, with its external behavior or with its internal features.

28.Difference between Priority and Severity
Ans- High Priority & High Severity: An error which occurs on the basic
functionality of the application and will not allow the user to use the system.
(Eg. A site maintaining the student details, on saving record if it, doesn't allow
to save the record then this is high priority and high severity bug.)

● High Priority & Low Severity: The spelling mistakes that happens on the
cover page or heading or title of an application.

● High Severity & Low Priority: An error which occurs on the functionality of
the application (for which there is no workaround) and will not allow the user to use the system but on click of link which is rarely used by the end
user.

● Low Priority and Low Severity: Any cosmetic or spelling issues which is
within a paragraph or in the report (Not on cover page, heading, title).

29.What is Bug Life Cycle?

Ans- ● “A computer bug is an error, flaw, mistake, failure, or fault in a
computer program that prevents it from working correctly or produces an incorrect result. Bugs arise from mistakes and
errors, made by people, in either a program’s source code or its

design. “The duration or time span between the first time defects is found and the time that it is closed successfully, rejected, postponed or deferred is called as ‘Defect Life Cycle’.

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

Ans- Functional Testing: Testing based on an analysis of the
specification of the functionality of a component or system.
‘Specification’ – E.g. Requirements specification, Use Cases,
Functional specification or maybe undocumented.
‘Function’ – what the system does

Non-Functional Testing: Testing the attributes of a component or system that do not relate to functionality, e.g. reliability,
efficiency, usability, interoperability, maintainability and
portability
May be performed at all Test levels (not just Non Functional Systems
Testing)

Measuring the characteristics of the system/software that can be quantified on a varying scale- e.g. performance test scaling

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

Ans- Test Planning in STLC is a phase in which a Senior QA manager determines the test plan strategy along with efforts and cost estimates for the project.

- Moreover, the resources, test environment, test limitations and the testing schedule are also determined.
- The Test Plan gets prepared and finalized in the same phase

SDLC Phases
Requirements
Collection/Gathering
Establish Customer Needs

Analysis Model And Specify the requirements- “What”
Design Model And Specify a Solution – “Why”
Implementation Construct a Solution In Software
Testing Validate the solution against the requirements
Maintenance Repair defects and adapt the solution to
the new requirements

34.What is the difference between test scenarios, test cases, and test script?
Ans- Test Scenario

- A Scenario is any functionality that can be tested. It is also called
Test Condition, or Test Possibility.
- Test Scenario is ‘What to be tested’
- Test scenario is nothing but test procedure.
- The scenarios are derived from use cases.
- Test Scenario represents a series of actions that are associated
together.
- Scenario is thread of operations

Test Case

- Test cases involve the set of steps, conditions and inputs which

can be used while performing the testing tasks.

- Test Case is ‘How to be tested’
- Test case consist of set of input values, execution precondition,

expected Results and executed post-condition developed to cover certain test Condition.

- Test cases are derived (or written) from test scenario.
- Test Case represents a single (low level) action by the

35.Explain what Test Plan is? What is the information that should be covered?

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the test plan strategy along with efforts and cost estimates for the project.

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schedule are also determined. The Test Plan gets prepared and finalized in the same phase.

36.What is priority?
Ans- Priority is Relative and Business-Focused. Priority defines the order in which we should resolve a defect. Should we fix it now, or can it wait? This priority status is set by the tester to the developer mentioning the time frame to fix the defect. If high priority is mentioned then the developer has to fix it at the earliest. The priority status is set based on the customer requirements.

37 What is severity?
Ans- Severity is absolute and Customer-Focused. It is the extent to which the defect can affect the software. In other words, it defines the impact that a given defect has on the system.

38.Bug categories are…

39. Advantage of Bugzilla .
Ans- Advantage of Bugzilla for Bugzilla is an open-source issue/bug tracking system that allows developers effectively to keep track of outstanding problems with their product. It is written in Perl and uses MYSQL database. This open bug-tracker

enables users to stay connected with their clients or employees, to communicate about problems effectively throughout the data management chain.

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41.What are the different Methodologies in Agile Development Model?
Ans- Agile model believes that every project needs to be handled differently and the existing methods need to be tailored to best suit the project requirements. In agile the tasks are divided to time boxes (small time frames) to deliver specific features for a release.
The Agile methodology is a way to manage a project by breaking it up into several phases. It involves constant collaboration with stakeholders and continuous improvement at every stage. Once the work begins, teams cycle through a process of planning, executing, and evaluating.

42. Explain the difference between Authorization and Authentication in Web testing. What are the common problems faced in Web testing?
To create HLR & TestCase of WebBased (WhatsApp web , Instagram) 1. WhatsApp Web : https://web.whatsapp.com/