**SOFTWARE QUALITY TESTING**

**ASSIGNMENT**

**MODULE – 2**

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**Q:1 What is exploratory testing?**

Exploratory testing is a concurrent process where Test design,

execution and logging happen simultaneously. When functionality

are checked in structure manner then functionality are check step by

step. When functionality are checked in ad-hoc manner then

functionality are check randomly.

**Q:2 What is traceability matrix?**

Traceability matrix is a one type of tracking. To protect against

changes you should be able to trace back from every system

component to the original requirement that caused its presence.

Forward Traceability – Mapping of Requirements to Test cases -

Backward Traceability – Mapping of Test Cases to Require

ments

Bi-Directional Traceability - A Good Traceability matrix is the

References from test cases to basis documentation and vice

versa.

**Q:3 What is boundary value analysis testing?**

In boundary value analysis valid values are devied in same part

it’s not fix.

Boundary value analysis is a method which refines equivalence

partitioning.

**Q:4 What is equivalence partitioning testing?**

In equivalence partitioning testing ‘in rang’ value is divide in

same part.

Aim is to treat groups of inputs as equivalent and to select

one representative input to test them all

Equivalence partitioning can be use for all levels of testing.

**Q:5 What is integration testing?**

Integration Testing is a level of the software testing process

where individual units are combined and tested as a group.

There are 2 type of Integration Testing

1) Component Integration Testing

(i) functional testing (ii) non-functional testing

2) System Integration Testing

There is two types methods of Integration Testing:

1) Bing Bang Integration Testing

2) Incremental Integration Testing

(i) Top Down Approach

(ii) Bottom Up Approach

Q6 What is determines the level of risk?

A factor that could result in future negative consequences; usually

expressed as impact and likelihood.

There is two type of risk:

(1) Product risk

(2) Project risk

Q**:7. What is Alpha testing?**

Alpha is always performed by the developers at the software

development site.

Sometimes it is also performed by Independent Testing

Team.

**Q: 8. What is Beta testing?**

Beta testing is always performed by the customers at their own site.

Beta Testing is always open to the market and public.

It is performed in Real Time Environment.

**Q:9 . What is component testing?**

A minimal software item that can be tested in isolation. It means “A

unit is the smallest testable part of software.”

component testing = Unit Testing, Module Testing or Program

Testing

Q:10 What is functional system testing?

There is two type of functional system testing.

(1) Requirement Based Functional Testing

(2) Process Based Testing

**Q:11 What is non-functional testing?**

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

functionality.

Performance testing is carried out to check & fine tune system

response times.

Reliability, Performance, Usability, Maintainability are check in non-

functional testing.

**Q:12 What is GUI testing?**

GUI testing is the process of testing the system’s GUI of the System

under Test.

GUI testing involves checking the screens with the controls like

menus, buttons, icons, and all types of bars – tool bar, menu bar,

dialog boxes and windows etc.

**Q:13 What is ad-hoc testing?**

Ad-hoc testing can be achieved with the testing technique called

Error Guessing.

The knowledge of testers in the system under test is very high.

There is three type of ad-hoc testing:

1) Buddy Testing : Two buddies mutually work on identifying defects

in the same module. One is a tester and second is a developer.

2) Pair testing : Two testers are work on identifying defects in the

same module.

3) Monkey testing : Randomly test the product or application

without test cases with a goal to break the system

**Q:14 What is load testing?**

Load testing is a performance testing to check system behaviour

under load.

It is perform for the application behaves when multiple users access

it simultaneously.

This testing usually identifies the maximum operating capacity of an

application.

**Q:15 What is Stress testing?**

> System is stressed beyond its specifications to check how

and when it fails.

> Stress testing is used to test the stability & reliability of the

system.

> Stress Testing is done to make sure that the system would

not crash under crunch situations.

> Stress testing is also known as endurance testing.

> The main purpose of stress testing is to make sure that the

system recovers after failure which is called as recoverability.

**Q:16 What is white box testing and list the type of white**

**box testing?**

Testing based on an analysis of the internal structure of the

component or system.

White box testing is also called glass testing or open box

testing.

There is three type of white box testing:

1) Statement coverage

2) Decision coverage

3) Condition coverage

**Q:17. What is black box testing? what are the different**

**black box testing techniques?**

Black box testing is either functional or nonfunctional,

without reference to the internal structure of the component

or system.

Specification-based testing technique is also known as ‘black-

box’

The technique of testing without having any knowledge of

the interior workings of the application is Black Box testing.

**Q:18. Mention what are the categories of defects?**

Database Defects,

Critical Functionality Defects,

Functionality Defects,

Security Defects,

User Interface Defects.

These are the categories of defects.

**Q:19. Mention what big-bang testing is?**

In Big Bang integration testing all components or modules is

integrated simultaneously, after which everything is tested as

a whole.

Big Bang testing has the advantage that everything is finished

before integration testing starts.

Q**:20. What is the purpose of exit criteria?**

We can know when to stop testing that is purpose of exit

criteria.

Q**:21. When should "Regression Testing" be performed?**

When smoke testing and sanity testing are passed then

Regression testing performed.

Q**:22. What is 7 key principles? Explain in detail?**

7 key principles is a general testing principles.

1) Testing shows presence of defects

Testing reduces the probability of undiscovered defects

remaining in the software but, even if no defects are found, it

is not a proof of correctness.

2) Exhaustive testing is impossible

Testing everything including all combinations of inputs and

preconditions is not possible.

3) Early testing

Testing activities should start as early as possible in the

development life cycle

4) Defect clustering

Cluster means group. Any defect, it is create problem in his

group’s functionality. That type of defect remove fast.

5) The Pesticide Paradox

Regularly reviewed and revised any project to different

testing team. This type of defect we can find more defects.

6) Testing is context dependent

Different kinds of sites are tested differently because

different sites have functionalities are different.

7) Absence of error fallacy

Any site, which has no defects but his client’s requirements

are not full-fill.

**Q:23. Difference between QA v/s QC v/s Testers**

1.QA - Activities which ensure the implementation of

processes, procedures and standards in context to

verification of developed software and intended

requirements.

2.QC - Activities which ensure the verification of developed

software with respect to documented (or not in some cases)

requirements.

3.Tester - Activities which ensure the identification of

bugs/error/defects in the Software.

Q:24. Difference between Smoke and Sanity?

If critical functionalities are check then perform a smoke

testing.

If new added or updated functionalities are check then

perform a sanity testing.

**25. Difference between verification and Validation?**

Verification done by developers and validation done by tester.

**Q:26. Explain types of Performance testing.?**

1) Stress testing

Stress Testing is done to make sure that the system would

not crash under crunch situations.

Stress testing is also known as endurance testing.

Most prominent use of stress testing is to determine the

limit, at which the system or software or hardware breaks.

2) Load testing

Load testing is a performance testing to check system

behaviour under load.

➔ This testing usually identifies the maximum operating

capacity of an application.

**Q:27. What is Error, Defect, Bug and failure?**

Error – When developer make a mistake then it’s called

error.

Defect – When that error found by tester then it’s called

defect.

Bug – When tester assign that defect to developer team and

developer team will accept that defect then it’s called bug.

Failure – When negative behaviour suddenly occurs

unexpectedly.

**Q:28. Difference between Priority and Severity**

Priority : Priority is Relative and Business-Focused.

Severity : Severity is absolute and CustomerFocused.

Q**:29. What is bug life cycle?**

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

**Q:30. Explain the difference between Functional testing and**

**Non-Functional testing?**

Functional testing : Functional testing is performed using the

functional specification provided by the client and verifies

the system against the functional requirements.

Functional testing is executed first Functional testing

describes what the product does.

Non-Functional testing : Non-Functional testing checks the

Performance reliability, scalability and other non-functional

aspects of the software system.

Non-functional testing should be performed after functional

testing Non-functional testing describes how good the

product works.

**Q:31. What is the difference between the STLC (Software**

**Testing Life Cycle) and SDLC (Software Development Life**

**Cycle)?**

STLC : Software Testing Life Cycle STLC is done by testers. It

is a process of software testing.

Testers are only find error/defect/bug but not correct that.

SDLC : Software Development Life Cycle

SDLC is done by designer, developer and tester.

It is a process of design, development, testing and

maintenance computer software or application.

Developer find error/defect/bug and correct that.

**Q:32. What is the difference between test scenarios, test**

**cases, and test script?**

Test scenarios : A Scenario is any functionality that can be

tested. It is also called Test Condition, or Test Possibility.

Test cases : Test cases involve the set of steps, conditions and

inputs which can be used while performing the testing tasks.

Test script : A set of sequential instruction that detail how to

execute a core business function.

**Q:33. Explain what Test Plan is?**

What is the information that should be covered.

Test plan means A document describing the scope, approach,

resources and schedule of intended test activities.

What to test, what roles will perform the test activities, how

the test activities should be done, and how the test results

will be evaluated? Are covered in test plan.

Q:34. What is priority?

Priority is Relative and Business-Focused.

There is four type of priority :

1)Low

2)Medium

3)High

4)Critical

35**. What is severity?**

Severity is absolute and Customer-Focused.

There is five type of severity :

1)Critical

2)Major (High)

3)Moderate (Medium)

4)Minor (Low)

5)Cosmetic

Q**:36. Bug categories are...**

Bug categories are Security, Database, Functionality, UI.

**Q:37. Advantage of Bugzilla.**

Open Source and Free

Robust Feature Set

Improved Communication and Collaboration:

Enhanced Productivity

Customization and Integration:

Scalability and Security

Automated Documentation

**Q:38. Difference between priority and severity**

Priority : Priority is Relative and Business-Focused.

Severity : Severity is absolute and Customer Focused.

**39. What are the different Methodologies in Agile**

**Development Model?**

Agile model is a combination of iterative and incremental

models.

Q:40. Explain the difference between Authorization and

Authentication in Web testing. What are the common

problems faced in Web testing?

**Q41write scenario of whats app chat message?**

Verify to open whats app perfect.

Verify to typing message perfect

Verify internet connectivity perfect

Verify to sent message double ,single click, or message sending show perfect.

Verify to sticker side show perfect

Verify to attachment file size limit perfect

**Q42 write pen scenario**

Verify the type of pen, whether it is a ballpoint pen, ink pen, or gel pen.

Verify that the user is able to write clearly over different types of papers.

Check the weight of the pen. It should be as per the specifications. In case not mentioned in the specifications, the weight should not be too heavy to impact its smooth operation

Verify if the pen is with a cap or without a cap.

Verify the color of the ink on the pen.

Check the odor of the pen’s ink on writing over a surface.

Verify the pen’s performance on different paper textures (smooth, rough, glossy, etc.) to ensure consistent ink dispersion and grip.

Verify the surfaces over which the pen is able to write smoothly apart from paper e.g. cardboard, rubber surface, etc.

Verify that the text written by the pen should have consistent ink flow without leaving any blob.

**Q43 scenario of pen stand ?**

Verify pen stand color

Verify stant size

Verify stand design

Verify stand inside pen capacity

**Q44 scenario of door?**

Verify if the door is single door or bi-folded door.  
Check if the door opens inwards or outwards.  
Verify that the dimension of the doors are as per the specifications.

Verify that the material used in the door body and its parts is as per the specifications.  
Verify that color of the door is as specified.  
Verify if the door is sliding door or rotating door.  
Check the position, quality and strength of hinges.  
Check the type of locks in the door.

Check the number of locks in the door interior side or exterior side.  
Verify if the door is having peek-hole or not.

**Q45 scenarios of ATM?**

Verify that all the labels and controls including text boxes, buttons, images, and links are present on the screen.  
Check the informative text written displayed on the screen is clearly visible and legible.  
Verify that the size, color, and UI of the different objects are as per the specifications.  
Verify that the application’s UI is responsive i.e. it should adjust to different screen resolutions of ATM machines.

Verify the type of ATM machine, if it has a touch screen, both keypad buttons only, or both.  
Verify that on properly inserting a valid card different banking options appear on the screen.  
Check that no option to continue and enter credentials is displayed to the user when the card is inserted incorrectly.  
Verify that the touch of the ATM screen is smooth and operational.  
Verify that the user is presented with the option to choose a language for further operations.  
Check that the user is asked to enter a pin number before displaying any card/bank account detail.  
Verify that there is a limited number of attempts up to which the user is allowed to enter the pin code.

**Q:46 When to used Usability Testing?**

In these problem used usability testing:

>Drop-down select lists is no work properly.

>Tab and Shift + Tab order should not work properly.

>Any buttons on a page are not accessible.

>If any pages not have a title.

>Page text is not left-justified.

42. What is the procedure for GUI Testing?

➔ The procedure for GUI Testing is:

>Build the model

>Determine Inputs for the model

>Calculate expected output for the model

>Run the Tests

>Compare the actual output with the expected output

> Decision on further action on the model.

**Q47. What is the procedure for GUI Testing?**

The procedure for GUI Testing is:

>Build the model

>Determine Inputs for the model

>Calculate expected output for the model

>Run the Tests

>Compare the actual output with the expected output

> Decision on further action on the model.

**Q48 scenario of microwave owen ?**

Verify that the dimensions of the oven are as per the specification provided.

Verify that the oven’s material is optimal for its use as an oven and as per the specification.

Verify that the oven heats the food at the desired temperature properly.

Verify that the oven heats food at the desired temperature within a specified time duration.

Verify the ovens functioning with the maximum attainable temperature.

Verify the ovens functioning with minimum attainable temperature.

Verify that the oven’s plate rotation speed is optimal and not too high to spill the food kept over it.

Verify that the oven’s door gets closed properly.

Verify that the oven’s door opens smoothly.

Verify the battery requirement of the microwave oven and check that it function’s smoothly at that power.

**Q49 Write a scenario of Coffee vending Machine?**

Verify that outer body, as well as inner part’s material, is as per the specification.

Verify that the machine’s body color as well brand is correctly visible and as per specification.  
Verify the input mechanism for coffee ingredients-milk, water, coffee beans/powder, etc.  
Verify that the quantity of hot water, milk, coffee powder per serving is correct.  
Verify the power/voltage requirements of the machine.  
Verify the effect of suddenly switching off the machine or cutting the power. The machine should stop in that situation and in power resumption, the remaining coffee should not get come out of the nozzle.  
Verify that coffee should not leak when not in operation.

**Q50 write scenario of chair?**

Verify that the chair is stable enough to take an average human load.  
Check the material used in making the chair-wood, plastic etc.  
Check if the chair’s leg are level to the floor.  
Check the usability of the chair as an office chair, normal household chair.  
Check if there is back support in the chair.  
Check if there is support for hands in the chair.  
Verify the paint’s type and color

Verify if the chair’s material is brittle or not.  
Check if cushion is provided with chair or not.

**Q51 create scenaros negative and positive GMAIL?**

Positive Scenario:

User successfully signs up for a new account on a website.

The system sends a welcome email to the user's registered email address.

The email is delivered without errors,

the content is accurate (e.g., includes a personalized greeting,

confirmation of account creation,

and next steps),

and the email is formatted correctly in the user's email client.

Negative scenario:

User enters incorrect login credentials on a website.

The system sends an error message to the user's email address.

The email is delivered without errors, the content is accurate

states that the login failed,

provides guidance on how to reset the password or contact support)

the email is formatted correctly in the user's email client.

The user's email address is invalid (e.g., misspelled, doesn't exist).

**Q52 create scenario online shopping to buy product?**

Verify to cart button

Verify product available or not

Verify to product search perfect or not

Verify to price product price show perfect or not

Verify to product wishlist add perfect or not

Verify product buy now button working perfect or not

Verify to check offer discount apply perfect or not

**Q53 scenario of wrist watch ?**

Verify the type of watch – analog or digital.

In the case of an analog watch, check the correctness time displayed by the second, minute, and hour hand of the watch.

In the case of a digital watch, check the digital display for hours, minutes, and seconds is correctly displayed.

Verify the material of the watch and its strap.

Check if the shape of the dial is as per specification.

Verify the dimension of the watch is as per the specification.

Verify the weight of the watch.

Check if the watch is waterproof or not.

Verify that the numbers in the dial are clearly visible or not.

Check if the watch is having a date and day display or not.

**Q54 write scenario of lift elevator?**

Verify lift size

Verify lift capacity

Verify lift floors

Verify lift company

Verify lift maintain proper or not

Verify lift person capacity

Verify emergency buttons

Verify lift have emergency phone system have it or not

Verify lift all button proper working or not.

**Q55 Write a Scenario of whatsapp Group (generate group)**

Verify all member added perfectly in group

Verify maximum member capacity of group

Verify group icon show perfect

Verify all admin have access proper working

Verify group member have access to write message or not

Verify file attachment download perfect in group

Verify all member latest version of whats app access all member file perfect

Verify message sent read pending show perfect

Q57 write scenario of whats app payment?

Verify your upi id generated perfectly for use whats app payment

Verify payment button work proper

Verify upi receiver is correct

Verify to fund have in your bank account so whats app can provide if fund is not available or available to show message perfect.

Verify to show message perfect if generate error in payment.