

Assignment:-2

Module–2(Manual Testing)

Q.1 What is Exploratory Testing?

Ans:-Exploratory testing is a concurrent process where
Test design, execution and logging happen simultaneously.

2 What is

Q. 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.

Q.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.

Q.4 What is Equivalence partitioning testing?

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

Q.5 What is Integration testing?

Ans:-Integration Testing is testing between the "System" and
"Acceptance" phases.

Q.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 fixed.

The Quality of systems can be improved through Lessons learned from Previous projects.

Q.7 What is Alpha testing?

Ans:-It is always performed by the developers at the software development site.Alpha

Testing is not open to the market and public.

Q.8 What is beta testing?

Ans:-Beta Testing is performed and carried out by users or you can say

people at their own locations and site using customer data.

Q.9 What is component testing?

Ans:- The testing of individual software component testing others name of unit testing.

Q.10 What is functional system testing?

Ans:-A requirement that specifies a function that a system or system

component must perform.

Q.11 What is Non-Functional Testing?

Ans:-Testing the attributes of a component or system that

do not relate to functionality.

Q.12 What is GUI Testing?

Ans:-GUI testing involves checking the screens with the controls like menus, buttons,

menu bar, dialog boxes and windows etc.

Q.13 What is Adhoc testing?

Ans:-Adhoc testing is an informal testing type with an aim to break the system.

Q.14 What is load testing?

Ans:-Load testing should be done to be certain the application can handle the anticipated number of users.

Q.15 What is stress Testing?

Ans:-Stress Testing is done to make sure that the system would not crash under crunch situations.

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

Ans:-Testing based on an analysis of the internal structure of the component or systems.

types of white box testing:-

- 1)Statement coverage
- 2)Decision coverage/Branch coverage
- 3)Condition coverage

1)Statement coverage:-

- The statement coverage is also known as line coverage or segment coverage.
- The statement coverage covers only the true conditions. The statement coverage can be calculated as shown below:

systement coverage= number of systement exercised * 100

total number of systement

2)Decision coverage:-

- Decision coverage also known as branch coverage or all-edges coverage. It covers both the true and false conditions unlikely the statement coverage.
- Aim is to demonstrate that all Decisions have been run at least once With an IF statement, the exit can either be TRUE or FALSE, depending on the value of the logical condition that comes after IF.
- The decision coverage can be calculated as shown below:

Decision coverage:- number of Decision outcome exercised * 100

total number of outcome decision

- A decision is an IF statement, a loop control statement
- (e.g. DO WHILE or REPEAT-UNTIL, JUMP, GO TO), or a CASE statement, where there are two or more outcomes from the statement.

Branch Coverage Testing >= Statement Coverage Testing.

3)Condition coverage:-

- This is closely related to decision coverage but has better sensitivity to the control flow.
- However, full condition coverage does not guarantee full decision coverage.
- Condition coverage reports the true or false outcome of each condition.
Condition coverage measures the conditions independently of each other.

Q.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 componets or system.

- Specification-based testing technique is also known as 'black-box' or input/output driven testing techniques because they view the software as a black-box with inputs and outputs.
- The testers have no knowledge of how the system or component is structured inside the box.
- black box test, a tester will interact with the system's user interface
- Techniques of Black Box Testing :-

1) Equivalence partitioning

2) Boundary value analysis

3) Decision tables

4) State transition testing

5) Use-case Testing

6) Other Black Box Testing

1)Equivalence partitioning:-

- Aim is to treat groups of inputs as equivalent and to select one representative input to test them all EP can be used for all Levels of Testing .
- If we want to test the following IF statement: "If value is between 1 and 100 (inclusive) (e.g value ≥ 1 and value ≤ 100) Then..." We could put a range of numbers as shown in the below figure.
- In EP we must identify Valid Equivalence partitions and Invalid Equivalence partitions where applicable The Valid partition is bounded by the values 1 and 10 Plus there are 2 Invalid partitions.

2)Boundary value analysis:-

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

3)Decision tables:-

- 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. This technique is sometimes also referred to as a "cause-effect" table. The reason for this is that there is an associated logic diagramming technique called "cause-effect graphing" which was sometimes used to help derive the decision table.

Table based technique where

1)Inputs to the system are recorded

2)Outputs to the system are defined

- Inputs are usually defined in terms of actions which are Boolean. Outputs are recorded against each unique.
- combination of inputs Using the Decision Table the relationships between the inputs and the possible outputs are mapped together.

4)State Transaction Testing:-

- State Transition Testing uses the following terms:

1)State Diagram: A diagram that depicts the states that a component or system can assume, and shows the events or circumstances that cause and/or result from a change from one state to another.

1)State Table: A grid showing the resulting transitions for each state combined with each possible event, showing both valid and invalid transitions.

2)State Transition: A transition between two states of a component or system.

3)State Transition Testing: A black box test design technique in which test cases are designed to execute valid and invalid state transitions. Also known as N-switch testing.

- Any system where you get a different output for the same input, depending on what has happened before, is a finite state system. A finite state system is often shown as a state diagram.

Q.18 Mention what are the categories of defects?

Ans:- Bug Category: Security, Database, Functionality (Critical/General), UI

Bug Severity: Severity with which the bug affects the application – Very High, High, Medium, Low, Very Low

Bug Priority: Recommended priority to be given for a fix of this bug – P0, P1, P2, P3, P4, P5 (P0-Highest, P5-Lowest)

Q.19 Mention what bigbang testing is?

Ans:-

- 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.
- The major disadvantage is that in general it is time consuming and difficult to trace the cause of failures because of this late integration. Here all component are integrated together at once, and then tested.

1)Top Down Approach

2)Bottom Up Approach

3)Stub and Driver Approach

4)Continuous Integration Approach

1)Top Down Approach:-

- Testing takes place from top to bottom, following the control flow or architectural structure (e.g. starting from the GUI or main menu).

- Components or systems are substituted by stubs.

In Top to down approach, testing takes place from top to down following the control flow of the software system.

2)Bottom Up Approach:-

- Testing takes place from the bottom of the control flow upwards.
- In the bottom up strategy, each module at lower levels is tested with higher modules until all modules are tested. It takes help of Drivers for testing.

3)Stub and Driver Approach:-

- Stubs and Drivers are the dummy programs in Integration testing used to facilitate the software testing activity.
- These programs act as substitutes for the missing models in the testing. They do not implement the entire programming logic of the software module but they simulate data communication with the calling module while testing.

Stub : Is called by the Module under Test.

Driver : Calls the Module to be tested.

4)Continuous Integration Approach:-

- Continuous Integration is a software development method where team members integrate their work at least once a day. In this method, every integration is checked by an automated build to detect errors.
- This concept was first introduced over two decades ago to avoid “integration hell,” which happens when integration is put off till the end of a project.
- In Continuous Integration after a code commit, the software is built and tested immediately.

Q.20 What is the purpose of exit criteria?

Ans:-

- 1) Successful Testing of Integrated Application.
- 2) Executed Test Cases are documented
- 3) All High prioritized bugs fixed and closed
- 4) Technical documents to be submitted followed by release Notes.

Q.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.
- You also need to ensure that the modifications have not caused unintended side-effects elsewhere and that the modified system still meets its requirements Regression Testing.
- Regression testing should be carried out: when testing bug-fix releases as part of the maintenance phase It should be applied at all Test Levels.
- It should be considered complete when agreed completion criteria for regression testing have been met.
- Regression test suites evolve over time and given that they are frequently are ideal candidates for automation.

Need of Regression Testing:-

- 1) Change in requirements and code is modified according to the requirement
- 2) New feature is added to the software
- 3) Defect fixing
- 4) Performance issue fix

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

Ans:-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

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.
- we find more defects, the probability of undiscovered defects remaining in a system reduces.
- However Testing cannot prove that there are no defects present.

2)Exhaustive Testing is Impossible:-

- Testing everything including all combinations of inputs and preconditions is not possible.
- So, instead of doing the exhaustive testing we can use risks and priorities to focus testing efforts.
- For example: In an application in one screen there are 15 input fields.

Why do not Testing Everything:-

Examples:

System has 20 screens

Average 4 menus / screen Average

3 options / menu

Average of 10 fields / screen

2 types of input per field

Around 100 possible values

Approximate total for exhaustive testing

$20 \times 4 \times 3 \times 10 \times 2 \times 100 = 480,000$ tests

Test length = 1 sec then test duration = 17.7 days

Test length = 10 sec then test duration = 34 weeks

Test length = 1 min then test duration = 4 years

Test length = 10 mins then test duration = 40 years!

3)Early Testing:-

- Testing activities should start as early as possible in the software or system development life cycle, and should be focused on defined objectives.
- Testing activities should start as early as possible in the development life cycle.
- These activities should be focused on defined objectives – outlined in the Test Strateg.

4)Defect Clustering:-

- A small number of modules contain most of the defects discovered during pre-release testing, or are responsible for the most operational failures.
- Defects are not evenly spread in a system They are "clustered"

In other words, most defects found during testing are usually confined to a small number of modules.

5)The Pesticide Paradox:-

- If the same tests are repeated over and over again, eventually the same set of test cases will no longer find any new defects. To overcome this "pesticide paradox", the test cases need to be regularly reviewed and revised, and new and different tests need

to be written to exercise different parts of the software or system
to potentially find more defects.

6)testing is Context Dependent:-

- Testing is basically context dependent.
- Testing is done differently in different contexts.
- Different kinds of sites are tested differently.
- For example Safety – critical software is tested differently from an e-commerce site.

7)Absence of Errors Fallacy:-

- It doesn't make it a good system
- Even after defects have been resolved it may still be unusable or does not fulfil the users' needs and expectations.

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

No.	Quality Assurance	Quality Control
1	Activities which ensure the implementation of processes, procedures and standards in context to verification of developed software and intended requirements.	Activities which ensure the verification of developed software with respect to documented (or not in some cases) requirements
2	Focuses on processes and procedures rather than conducting actual testing on the system.	Focuses on actual testing by executing Software with intend to identify bug/defect through implementation of procedures and process.
3	Process oriented activities.	Product oriented activities.

4	Preventive activities.	It is a corrective process.
5	It is a subset of Software Test Life Cycle (STLC).	QC can be considered as the subset of Quality Assurance.

Q.24 Difference between Smoke and Sanity?

No	Smoke	Sanity
1	This testing is performed by the developers or testers	Sanity testing is usually performed by testers
2	Smoke testing is usually documented or scripted	Sanity testing is usually not documented and is unscripted
3	Smoke testing is like General Health Check UP	sanity Testing is like specialized health
4	Smoke Testing is performed to ascertain that the critical functionalities of the program is working fine	Sanity Testing is done to check the new functionality / bugs have been fixed
5	The objective of this testing is to verify "stability" of the system in order to with more rigorous testing	The objective of the testing is to verify the "rationality" of the system in order proceed to proceed with more rigorous testing

Q.25 Difference between verification and Validation?

Ans:-

No	Verification	Validation
Definition	the process of evaluating work-products (not the actual final product) of a development	The process of evaluating software during or at the end of the development process to determine whether it

	phase to determine whether they meet the specified requirements for that phase	satisfies specified business requirements.
Objective	To ensure that the product is being built according to the requirements and design specifications. In other words, to ensure that work	To ensure that the product actually meets the user's needs, and that the specifications were correct in the first place. In other words, to demonstrate that the product fulfills its intended use
Question	Are we building the product right?	Are we building the right product?
Evaluation Items	Plans, Requirement Specs, Design Specs, Code, Test Cases	The actual product/software
Activities	<ul style="list-style-type: none"> · Reviews · Walkthroughs · Inspections 	<ul style="list-style-type: none"> · Testing

Q.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.

The focus of Performance testing is checking a software programs

- 1) Speed – Determines whether the application responds quickly
- 2) Scalability – Determines maximum user load the software application can handle.
- 3) Stability – Determines if the application is stable under varying loads

Types of Performance Testing:-

- 1) Load testing
- 2) Stress testing
- 3) Endurance testing
- 4) Spike testing
- 5) Volume testing
- 6) Scalability testing

1) Long Load time: –

- Load time is normally the initial time it takes an application to start.
- This should generally be kept to a minimum.

2) Poor response time: –

- Response time is the time it takes from when a user inputs data into the application until the application outputs a response to that input.

Generally this should be very quick

3) Poor scalability –

- A software product suffers from poor scalability when it cannot handle the expected number of users or when it does not accommodate a wide enough range of users.
- Load testing should be done to be certain the application can handle the anticipated number of users.

4) Bottlenecking –

- Bottlenecks are obstructions in system which degrade overall system performance. Bottlenecking is when either coding errors or hardware issues cause a decrease of throughput under certain loads. Bottlenecking is often caused by one faulty section of code.
- Performance Test Tools HP Load runner – is the most popular performance testing tools on the market today. This tool is capable of simulating hundreds of thousands of users, putting applications under real life loads to determine their behavior under expected loads.
- Load runner features a virtual user generator which simulates the actions of live human users. HTTP Load – a throughput testing tool aimed at testing web servers by running several http or https fetches simultaneously to determine how a server handles the workload.
- Proxy Sniffer – one of the leading tools used for load testing of web and application servers.
- It is a cloud based tool that's capable of simulating thousands of users.

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

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

Defect:- error found by tester is called defect.

Bug:- defect accepted by development team then it is called bug.

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

Q.28 Difference between Priority and Severity?

No	Priority	Severity
1	Priority is a term that defines how fast we need to fix a defect.	Severity is a term that denotes how severely a defect can affect the functionality of the software.
2	Priority is basically a parameter that decides the order in which we should fix the defects.	Severity is basically a parameter that denotes the total impact of a given defect on any software.
3	Priority relates to the scheduling of defects to resolve them in software.	Severity relates to the standards of quality.
4	The value of priority is subjective	The value of severity is objective.
5	The value of Priority changes from time to time.	The value of Severity changes continually from time to time.

Q.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."

Q.30 Explain the difference between Functional testing and Non-Functional testing?

No	Functional testing	Non-Functional testing
1	Functional testing is performed using functional specification provided by the client and verifies the system against the functional.	the Non-Functional testing checks the Performance reliability, scalability and other non-functional aspects of the software system.
2	Functional testing is executed first	Non-functional testing should be performed after functional testing

3	Manual testing or automation tools can be used for functional testing	Using tools will be effective for this testing
4	Business requirements are the inputs to functional testing	Performance parameters like speed , scalability are inputs to non-functional testing.
5	Functional testing describes what the product does	Nonfunctional 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)?

No	STLC	SDLC
1	STLC is mainly related to software testing	SDLC is mainly related to software development.
2	It focuses only on testing the software.	Besides development other phases like testing is also included.
3	STLC involves only five phases or steps.	SDLC involves total six phases or steps.
4	In STLC, less number of members (testers) are needed.	In SDLC, more number of members (developers) are required for the whole process.
5	It helps in making the software defects free.	It helps in developing good quality software.
6	STLC phases are performed after SDLC phases.	SDLC phases are completed before the STLC phases.

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

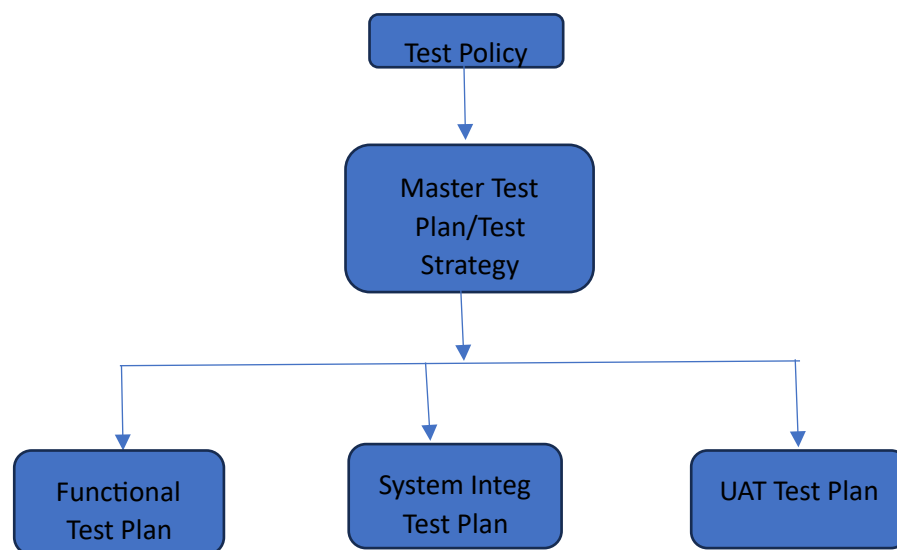
No	Test scenarios	Test cases	Test script
1	Is any functionality that can be tested.	Is a set of executed to verify particular features or functionality .	Is a set of instructions to test an app automatically.
2	Helps test the end-to-end functionality in an agile way.	Helps in exhaustive testing of an app.	Helps to test specific things repeatedly.

3	Is more focused on what to test.	Is focused on what to test and how to test.	Is focused on the expected result.
4	Takes less time and fewer resources to create .	Requires more resources and time.	Requires less time for testing but more resources for sripts creating and updating.
5	Includes an end-to-end functionality to be tested.	Includes test steps, data, expected results for testing.	Includes different commands to develop a script

Q.33 Explain what Test Plan is? What is the information that should be covered?

Ans:-

- A document describing the scope, approach, resources and schedule of intended test activities
- Determining the scope and risks, and identifying the objectives of testing.
acquisition, supply, development, operation and maintenance.
- Defining the amount, level of detail, structure and templates for the test documentation.
- All projects require a set of plans and strategies which define how the testing will be conducted. There are number of levels at which these are defined:-



- Defines how the organisation will conduct testing.
- Defines how the project will conduct testing.
- Defines how each level of testing will be conducted

1)The organisation's test policy

2)Scope of the testing being performed

- 3) Testing objectives
- 4) Project Risks – e.g. business, technical, people
- 5) Constraints – e.g. business imposed, financial, contractual etc
- 6) Criticality (e.g. system/component level)
- 7) Testability
- 8) Availability of resources

Test Planning Activities:-

- Approach: Defining the overall approach of testing (the test strategy), including the definition of the test levels and entry and exit criteria.
- Integrating and coordinating the testing activities into the software life cycle activities: acquisition, supply, development, operation and maintenance.

Making decisions about:

- 1) what to test
- 2) who do testing? i.e. what roles will perform the test activities
- 3) when and how the test activities should be done and when they should be stopped (exit criteria – see next slides)
- 4) how the test results will be evaluated

Q.34 What is priority?

Ans:- Priority is basically a parameter that decides the order in which we should fix the defects.

Q.35 What is severity?

Ans:- Severity is basically a parameter that denotes the total impact of a given defect on any software.

Q.36 Bug categories are?

Ans:- Security, Database, Functionality (Critical/General), UI

Q.37 Advantage of Bugzilla .

Ans:- 1) It improves the quality of the product.

2) It enhances the communication between the developing team and the testing team.

3)It has the capability to adapt to multiple situations.

Q.38 What are the different Methodologies in Agile Development Model?

Ans:- 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.

Q.39 Explain the difference between Authorization and Authentication in Web testing. What are the Authorization common problem faced in Web testing?

No	Authorization	Authentication
1	Authorization determines what resources a user can access.	Authentication verifies who the user is.
2	Authorization always takes place after authentication.	Authentication is the first step of a good identity and access management process.
3	Authorization isn't visible to or changeable by the user.	Authentication is visible to and partially changeable by the user.

common problem:-

Authentication: Accepting an invalid username/password

Authorization: Accessibility to pages though permission not given

Q.40 Write a scenario of only What app chat messages?

Ans:- 1) WhatsApp chat messages show who has messaged and the date the message was received or not.

2) A message can be deleted for everyone, deleted for me and deleted or not.

3) The phone number used by the user what app application can be updated or not.

4) Check whether the user can send and receive chats in all available languages.

5) Check whether the user can send and receive chats in all available languages.

6) Photo and song are sent or not.

7) Video call audio call or not.

8)User can send what app DP and status or not.

9) Recordings can be unlocked and deleted or not.

10) User can set chat wallpaper or not.

11) A message can be starred or not.

- 12) A message can be copied or not.
- 13) Sets user settings such as Last Seen, On Off, Online Status, etc.
- 14) Whether the message is highlighted or not when touched.
- 15) User can update notification settings or not.
- 16) Emoji can be sent in what app chats or not.

Q.41 Write a Scenario of Pen

Ans:- 1) Check if the text written by the pen is waterproof or not.

- 2) In the case of a ballpoint pen, verify the size of the tip.
- 3) For ink pens, verify that the mechanism to refill the pen is easy to operate.
- 4) Verify if the text written by the pen is erasable or not.
- 5) Check the functioning of the pen by applying normal pressure during writing.
- 6) Verify the strength of the pen's outer body. It should not be easily breakable.
- 7) Verify the type of pen, whether it is a ballpoint pen, ink pen, or gel pen.
- 8) Verify that the user is able to write clearly over different types of papers.
- 9) Verify that the user is able to write normally by tilting the pen at a certain angle instead of keeping it straight while writing.
- 10) Check the grip of the pen, and whether it provides adequate friction for the user to comfortably grip the pen.
- 11) Verify that text written by pen should not get faded before a certain time as mentioned in the specification.
- 12) Verify that the text written by the pen should have consistent ink flow without leaving any blob.
- 13) Check the grip of the pen, and whether it provides adequate friction for the user to comfortably grip the pen.

Q.42 Write a Scenario of Pen Stand

Ans:- 1) Check whether the pen stand is light or heavy in weight.

- 2) Whether the shape kept in the stand is small or large, it will shine.
- 3) Check whether the design is even made in the pen stand.
- 4) The pen stand should not be of such material that it breaks when dropped.
- 5) Pens can be kept evenly in the box of the pen stand or not.
- 6) What is the height and length of the pen stand?

- 7) The surface of the pen stand should not be rough.
- 8) Applying pressure on the pen stand should not cause it to break.
- 9) Check the physical material of the pen stand.
- 10) The bio physical material of the pen stand should be wood, plastic or paper and should not break easily.
- 11) Check the color of the outer part of the pen stand should be as per specification.
- 12) The exterior of the pen stand should not be discolored.
- 13) If the shape of the pen stand is round square then it should be proper.
- 14) Check if the pan is held in the stand.
- 15) Whether or not the pen stand is kept large or small.

Q.43 Write a Scenario of Door

- Ans:-1) Verify if the door is having stopper or not.
- 2) Verify if the door closes automatically or not – spring mechanism.
 - 3) Verify if the door makes noise when opened or closed.
 - 4) Check the door condition when used extensively with water.
 - 5) Check the door condition in different climatic conditions- temperature, humidity etc.
 - 6) Verify if the door is single door or bi-folded door.
 - 7) Check if the door opens inwards or outwards.
 - 8) Verify that the dimension of the doors are as per the specifications.
 - 9) Verify that the material used in the door body and its parts is as per the specifications.
 - 10) Verify that color of the door is as specified.
 - 11) Verify if the door is sliding door or rotating door.
 - 12) Check the position, quality and strength of hinges.
 - 13) Check the type of locks in the door.
 - 14) Check the number of locks in the door interior side or exterior side.
 - 15) Verify if the door is having peek-hole or not.

Q.44 Write a Scenario of ATM

- Ans:-1) Verify that the user's session timeout is maintained.
- 2) Check that the user is not allowed to exceed one transaction limit amount.

- 3) Verify that the user is not allowed to exceed the one-day transaction limit amount.
- 4) Verify that the user is allowed to do only one transaction per pin request.
- 5) Check that in case the ATM machine runs out of money, a proper message is displayed to the user.
- 6) Check that no option to continue and enter credentials is displayed to the user when the card is inserted incorrectly.
- 7) Verify that the touch of the ATM screen is smooth and operational.
- 8) Verify that the user is presented with the option to choose a language for further operations.
- 9) Check that the user is asked to enter a pin number before displaying any card/bank account detail.
- 10) Verify that there is a limited number of attempts up to which the user is allowed to enter the pin code.
- 11) Verify the type of ATM machine, if it has a touch screen, both keypad buttons only, or both.
- 12) Verify that on properly inserting a valid card different banking options appear on the screen.
- 13) Check that the pin is displayed in masked form when entered.
- 14) Verify that the user is presented with different account type options like- saving, current, etc

Q.45 When to use Usability Testing?

Ans:- usability testing before putting any design resources to work. Identify specific areas where testing and validation can enhance your concept.

Q.46 What is the procedure for GUI Testing?

- Ans:-
- 1) GUI elements for size, position, width, length and acceptance of characters or numbers.
 - 2) the Colour of the font and warning messages is aesthetically pleasing.
 - 3) the images have good clarity.
 - 4) the images are properly aligned.

Q.47 Write a scenario of Microwave Oven?

- Ans:-
- 1) Verify that the text written over the oven's body is clearly readable.
 - 2) Verify that the digital display is clearly visible and functions correctly.
 - 3) Verify that the temperature regulator is smooth to operate.
 - 4) Verify that the temperature regulator works correctly.
 - 5) Check the maximum capacity of the oven and test its functioning with that volume of food.

- 6) Verify that the dimensions of the oven are as per the specification provided.
- 7) Verify that the oven's material is optimal for its use as an oven and as per the specification.
- 8) Verify that the oven heats the food at the desired temperature properly.
- 9) Verify that the oven heats food at the desired temperature within a specified time duration.
- 10) Verify the ovens functioning with the maximum attainable temperature.
- 11) Verify the ovens functioning with minimum attainable temperature.
- 12) Check the oven's functionality with different kinds of food – solid, and liquid.
- 13) Check the oven's functionality with different food at different temperatures.
- 14) Verify the oven's functionality with different kinds of container material.
- 15) Verify that the power cord of the oven is long enough.

Q.48 Write a scenario of Coffee vending Machine?

Ans:- 1) Verify that pressing the coffee button multiple times leads to multiple serving of coffee.

2) Verify that there is the passage for residual/extra coffee in the machine.

3) Verify that machine should work correctly in different climatic, moistures and temperature conditions.

4) Verify that machine should not make too much sound when in operation.

5) Performance test – Check the amount of time the machine takes to serve a single serving of coffee.

6) Verify that the digital display displays correct information.

7) Check if the machine can be switched on and off using the power buttons.

8) Check for the indicator lights when the machine is switched on-off.

9) Verify that the functioning of all the buttons work properly when pressed.

10) Verify that each button has an image/text with it, indicating the task it performs.

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

12) Verify that the machine's body colour as well brand is correctly visible and as per specification.

13) Verify the input mechanism for coffee ingredients-milk, water, coffee beans/powder, etc.

14) Verify that the quantity of hot water, milk, coffee powder per serving is correct.

15) Verify the power/voltage requirements of the machine.

Q.49 Write a scenario of chair?

Ans:- 1)Check if the chair's leg are level to the floor.

2)Check the usability of the chair as an office chair, normal household chair.

3) Verify the paint's type and colour.

4)Verify if the chair's material is brittle or not.

5) Verify that the dimension of chair is as per the specifications.

6)Verify that the weight of the chair is as per the specifications.

7)Check the height of the chair's seat from floor.

8)Verify that the chair is stable enough to take an average human load.

9)Check the material used in making the chair-wood, plastic etc.

10)Check if there is back support in the chair.

11)Check if there is support for hands in the chair.

12) Check if cushion is provided with chair or not.

13)Check the condition when washed with water or effect of water on chair.

Q.50 To Create Scenario (Positive & Negative)

1. Facebook Chat on Mobile.

Ans:- Positive :-

1)Audio call video call or not in face book chat.

2)Share option opens properly in face book chat or not.

3)Return option opens properly in face book chat or not.

4)Whether or not the photo that is sent is deleted.

5)Whether the message is copy, pen, deleted or replied to.

6)Check whether the message is sent or not.

7)Whether the message we made in face book chat is highlighted or not.

8)Whether or not Facebook shows the profile of the person in front of the chat.

9)Whether to show the face book profile of the other person in face book chat or not.

10)Whether the location is properly sent in face book chat or not.

11)Camera proper opens in face book chat or not.

12)Game can be played in face book chat or not.

13)Facebook set send photo properly or not.

14) After sending the photo and clicking on it, the emoji comes or not.

15)Facebook records in the set or not.

Negative:-

- 1) Check the message functionality working on all supported Devices
- 2)Check the message functionality working on all supported platforms/browsers
- 3)Check the scroll bar displays wherever necessary
- 4)Check the button size
- 5)Check the button colour
- 6)Check the appropriate placeholder given to text boxes
- 7)Check the appropriate tooltip given to buttons
- 8)Check the expand/collapse buttons work properly
- 9)Check all labels are displayed correctly
- 10)Check the user is able to navigate using the tab key
- 11)Verify that the arrow keys work correctly
- 12)Verify that profile pictures display clearly

2.Gmail (receiving mail)

Positive:- 1)Verify that unread email count decreases by one on reading an email (marking an email as read).

2)Verify that email recipients in cc are visible to all users.

3)Verify that email recipients in bcc are not visible to the user.

4)Verify that all received emails get piled up in the 'Inbox' section and get deleted in cyclic fashion based on the size availability.

5)Verify that email can be received from non-Gmail email Ids like – yahoo, Hotmail etc.

6)Verify that a newly received email is displayed as highlighted in the Inbox section.

7)Verify that a newly received email has correctly displayed sender email Id or name, mail subject and mail body(trimmed to a single line).

8)Verify that on clicking the newly received email, the user is navigated to email content.

9)Verify that the email contents are correctly displayed with the desired source formatting.

10)Verify that any attachments are attached to the email and are downloadable.

11)Verify that the attachments are scanned for viruses before download.

12)Verify that count of unread emails is displayed alongside 'Inbox' text in the left sidebar of Gmail.

13) Verify that unread email count increases by one on receiving a new email.

Negative:-

- 1) Verify that the Reply and Forward buttons are displaying in the bottom of the email content.
- 2) Verify that all the read emails are not highlighted.
- 3) Verify that unread emails count is displayed beside 'Inbox' text in the left sidebar of Gmail.
- 4) Verify that unread emails count is increased as per the number of new emails we received.
- 5) Verify that the unread emails count is increased when we mark an email as unread.
- 6) Verify that the unread emails count is decreased when we mark an email as read or opened.
- 7) Verify that email recipients in CC are visible to all the users whose emails are present.
- 8) Verify that email recipients in BCC are not visible to other users in the TO, CC or BCC section.

3. Online shopping to buy product (flipcart)

Positive: 1) Whether or not the order summary opens in the product.

- 2) After the product is selected, the address can be entered and changed or not in Buy Now.
- 3) Shows how much content has been viewed in the product or not.
- 4) Shows how many offers are applied to the product or not.
- 5) Shows the date when the product will arrive after ordering or not.
- 6) A gift card is added to the product or not.
- 7) Email can be added to identity or not.
- 8) Shows the price detail of the product or not.
- 9) Shows the total amount of the product or not.
- 10) Whether payment no option works properly in the product or not.
- 11) Whether the product is selected or not.
- 12) After the product is selected, buy now is clicked or not.
- 13) After the product is selected, the size is selected or not.
- 14) After selecting the product select the side to continue or not.
- 15) Shows how many person offs are in the product or not.

Negative:-

- 1) User should be able to update items in the cart.

- 2)Checkout should happen successfully for the items added to the cart.
- 3)Shipping costs for different products added to the cart.
- 4)Coupons should be applied successfully to the cart.
- 5)Cart should retain the items even when the app is closed.
- 6) Email and order id should be sent after placement of order.
- 7)Users should be able to cancel the order.

Q.51 Write a Scenario of Wrist Watch

- Ans:-**
- 1)Verify if the dial has glass covering or plastic, check if the material is breakable or not.
 - 2)Verify if the dial's glass/plastic is resistant to minor scratches or not.
 - 3)Check the battery requirement of the watch.
 - 4)Verify the type of watch – ana log or digital.
 - 5)In the case of an ana log watch, check the correctness time displayed by the second, minute, and hour hand of the watch.
 - 6) Verify the dimension of the watch is as per the specification.
 - 7)Verify the weight of the watch.
 - 8)Check if the watch is waterproof or not.
 - 9)Verify that the numbers in the dial are clearly visible or not.
 - 10)Check if the watch is having a date and day display or not.
 - 11) Verify the color of the text displayed in the watch – time, day, date, and other information.
 - 12)Verify that clock's time can be corrected using the key in case of an analog clock and buttons in case of a digital clock.
 - 13)Check if the second hand of the watch makes ticking sound or not.
 - 14)Verify if the brand of the watch and check if its visible in the dial.
 - 15)Check if the clock is having stopwatch, timers, and alarm functionality or not.

Q.52 Write a Scenario of Lift(Elevator)

- Ans:-**
- 1)Is there lighting in the lift or not?
 - 2)The door should not open when the elevator is in operation.
 - 3)Whether the lift button works or not
 - 4)The buttons on the inside of the lift work the same or not.
 - 5)Small or big elevator buttons.

- 6)Colour of elevator button.
- 7)Whether the lift door moves smoothly or not.
- 8)The material used in the lift is correct or not.
- 9)Check the weight and capacity of the lift.
- 10)Whether the buttons for opening and closing the lift work the same or not.
- 11)Lifts should have their buttons according to the number of floors.
- 12)Whether the lift goes to the floor we want to go to or not.

Q.53 Write a Scenario of what app Group (generate group)

Ans:- 1)Whether or not it shows the date on which the message was received in the whatsapp group.

- 2)Touching on a message in a what app group will show an emoji on it or not.
- 3)Can send emoji from emoji in what app group or not.
- 4)Messages can be deleted in what app group or not.
- 5)When touching a message in a what app group, it is highlighted or not.
- 6)Whether the message is sent properly in the what app group or not.
- 7) Payment no option in what app group works properly or not.
- 8)Camera proper opens in what napp group or not.
- 9)Recording in what app group or not
- 10)More option in what app group working properly or not.
- 11)Whether the photo is sent properly in the what app group or not.
- 12)Can the settings be changed in what app or not?
- 13)Audio call, video call or not in what app group.
- 14)If a member sends a message in a what app group, it shows his name and DP or not.

Q-54 Write a Scenario of instagram (video call with chat)

Ans:-1)Instagram shows the time and frequency when a message has been received or not.

- 2)Save post with friend in instagram or not.
- 3)Photo can be sent in instagram or not.
- 4)Camera opens in instagram or not
- 5)Can send messages in instagram chat or not.

- 6)Whether to show profile photo of front person in instagram or not.
- 7)The user of the opposite person in instagram and shows whether or not.
- 8)Audio call video call can be made in instagram chat or not.
- 9)Reels can be sent in instagram or not.
- 10)Touching on the sent message and reels in instagram will show emoji and option to reply or not.
- 11)In instagram photo video can be sent from gallery or not.
- 12)Messages, videos, photos sent in Instagram can be deleted or not.

Q-55 Write a scenario of WhatsApp payment.

- Ans:-** 1) Whether our account is created to make what app payment or not.
- 2)When we enter our bank in the what app payment option, does our name appear or not?.
 - 3)Check whether the payment is done properly in what app payment.
 - 4) UPI option working in what app payment option or not.
 - 5)Bank can be selected in payment option of what app or not.
 - 6)WhatsApp payment option has option to search bank or not.
 - 7) In what app payment after entering the number of UPI id a payment is done or not.
 - 8)WhatsApp shows the name of the person we have paid in the payment or not.
 - 9) Bank verification can be done in the payment option of what app or not.
 - 10)SIM card is selected for what app payment or not.

