Q.1 What is Error, Defect, Bug and failure ?

Ans. Error : any abnormal behavior

Missing : spelling mistake , wrong syntax, [,], [;] etc.

Defect : When the software does not behave as Per used need .

Bug : if the developer agree that this is actually defect then it is bug .

Failure : if the software system is not as per SRS .

Q.2 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 tests are typically written and run by software developers to ensure that code meets its design and behaves as intended with debugging tool.

- Unit testing is performed by using the White Box Testing method .

Q.3 What is functional system testing ?

Ans. A requirement that specifies a function that a system or system component must perform

- A Requirement may exist as a text document and model

Q.4 What is non- functional testing ?

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

Q.5 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.

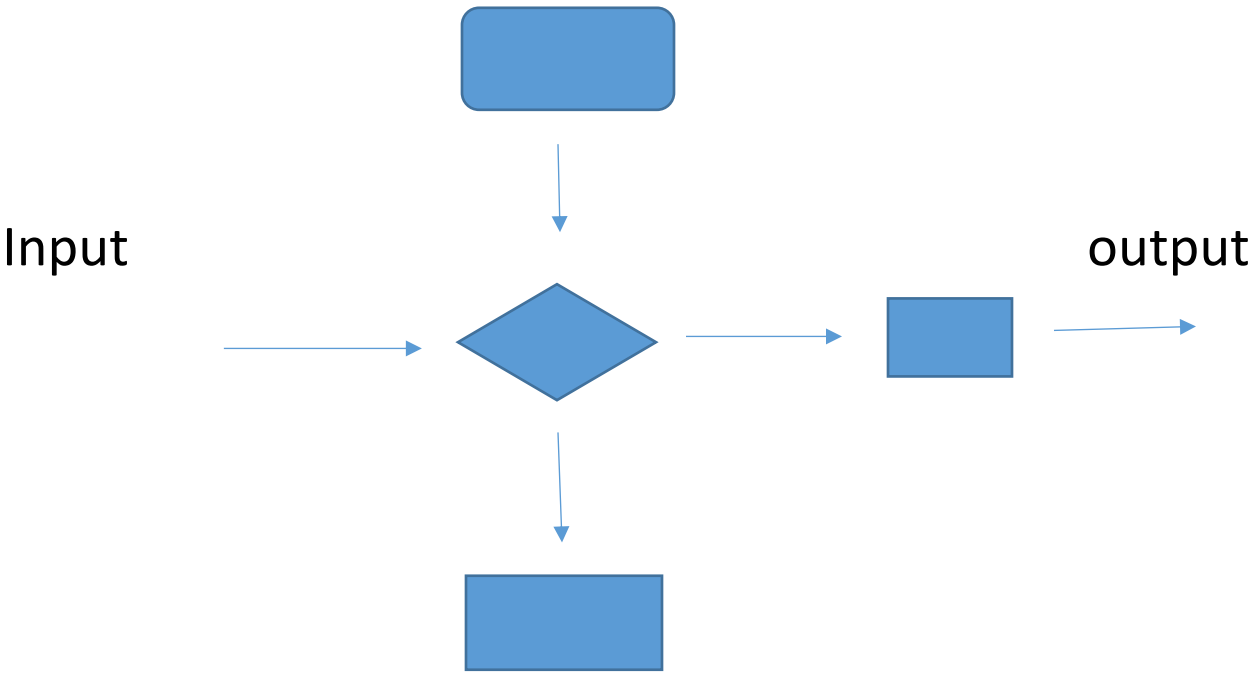
In fact is does not create test cases altogether!

This testing is primarily performed if the knowledge of testers in the system under test is very high.

Q.6 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 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.



➢ The different types of coverage are:

- Statement coverage
- Decision coverage
- Condition coverage

Q.7 What is black box testing ? what are the different black box testing techniques ?

Ans . Testing, either functional or non-functional, without reference to the internal structure of the component or system.

The testers have no knowledge of how the system or component is structured inside the box. In black-box testing the tester is concentrating on what the software does, not how it does it.

➢ Techniques of Black Box Testing

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

Q.8 Difference between QA / QC / Tester

S.N	QA	QC	TESTER
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.	Activities which ensure the identification of bugs/error/defects in the Software.
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	Focuses on actual testing.
3	Process oriented activities.	Product oriented activities.	Product oriented activities.
4	Preventive activities.	It is a corrective process.	It is a preventive proces
5	It is a subset of Software Test Life Cycle (STLC).	QC can be considered as the subset of Quality Assurance.	Testing is the subset of Quality Control

Q.9 Explain the Difference between Functional testing vs Non-Functional testing

Functional testing	Non-Functional testing
Functional testing is performed using the functional specification provided by the client and verifies the system against the functional requirements l	Non-Functional testingchecksthe Performance, reliability, scalability and other non-functional aspects of the software system.
Functional testing is executed first	Non functional testing should be performed after functional testing
Manual testing or automation tools can be used for functional testing	Using tools will be effective for this testing
Business requirements are the inputs to functional testing	Performance parameters like speed , scalability are inputs to non-functional testing.
Functional testing describes what the product does	Nonfunctional testing describes how good the product works
Easy to do manual testing	Tough to do manual testing
➢ Types of Functional testing are : ● Unit Testing ● Smoke Testing ● Sanity Testing ● Integration Testing ● White box testing ● Black Box testing ● User Acceptance testin ● Regression Testing	➢ Types of Nonfunctional testing are : ● Performance Testing ● Load Testing ● Volume Testing ● Stress Testing ● Security Testing ● Installation Testing ● Penetration Testing ● Compatibility Testin

Q.10 Difference between Smock and Sanity ?

Smock	Sanity
Check the critical functionality	Check the new functionality
It is done in intial stage	It is done after 30 bulids.
It check the stability	It check the sanity / rationality
Part of acceptance testing	Part of regression testing
General helth check up	Advance helth check up
Done by tester and developer	Done by tester
It check the system end to end	It check only a particular function of entire system

Q.11 Difference between verification and validation

criteria	verification	validation
Definition	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.	The process of evaluating software during or at the end of the development process to determine whether it satisfies specified business requirements
Objective	To ensure that the product is being built according to the requirements and design specifications. In other words, to	To ensure that the product actually meets the user's needs, and that the specifications were correct

	ensure that work products meet their specified requirements.	in the first place. In other words, to demonstrate that the product fulfills its intended use when placed in its intended environment.
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	• Reviews • Walkthroughs • Inspections	Testing

Q.12 what is Exploratory testing ?

- Exploratory testing is a software testing technique that does not use any specific test design, plan or approach.
- It is a software testing technique in which the testers explore and identify different means of evaluating and improving the quality of the software.

Q.13 What is integration testing ?

- Integration Testing : Testing performed to expose defects in the interfaces and in the interactions between integrated components or systems

- Integration Testing is a level of the software testing process where individual units are combined and tested as a group.

Q.14 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

- EP can be used for all Levels of Testing
- EP says that by testing just one value we have tested the partition (typically a mid-point value is used). It assumes that:
- If one value finds a bug, the others probably will too
- If one doesn't find a bug, the others probably won't either In EP we must identify Valid Equivalence partitions and Invalid

Q.15 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

- refines equivalence partitioning.
- Boundary value analysis generates test cases that highlight errors better than equivalence partitioning. The trick is to concentrate soft

Q.16 When should "Regression Testing ''be performed ?

- when the system is stable and the system or the environment
- It should be applied at all Test Levels
- when testing bug-fix releases when as part of the maintenance
- It should be considered complete when agreed completion criteria for regression testing have been met

Q. 17 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.

Q.18 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.

Q.19 Explian types of performance testing .

Ans. Types of Performance Testing :

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

Q. 20 What is GUI testing ?

Ans . Graphical User Interface (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.21 . Online shopping to buy product (flipkart)

- **Positive test scenario**

- product details

- product details

- product size chart (in case of clothes , shoes etc.)
- product best offers
- product delivery date accordihng to user selecting the date

- product payment options

- product ratings and reviews

- product payments EMI option also

- product buy now and add to cart

- product return policy details
- product warranty and gurrantte option

- product services

- check that share option is available or not

- check that user is able to complaint to company for inconvient services or not

- check that after buying of product user can be able to see the product basic details are shown like,

- product shipping detail

- check that user can see the terms and conditions of the product before the buying the product or not

Q.22 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.

Q.23 What is beta testing ?

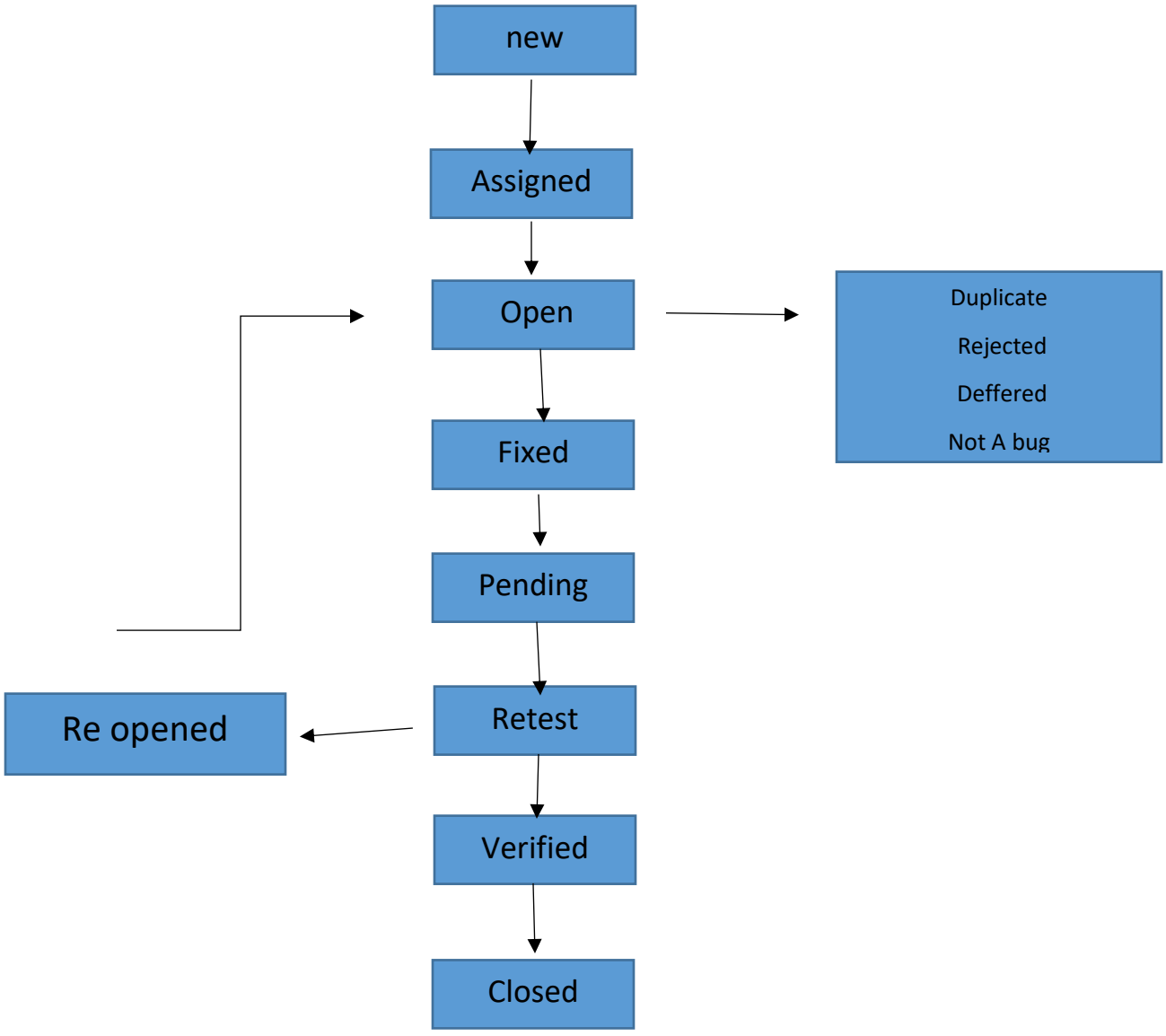
Ans. Beta Testing (field testing) is performed and carried out by users or you can say people at their own locations and site using customer data.

It is only a kind of Black Box Testing .

Q.24 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 .

➢ Bug life cycle



Q.25 Mention what are the categories of defect ?

Ans.

1. Data Quality/Database Defects: Deals with improper handling of data in thedatabase.

Examples: Values not deleted/inserted into the database properly

: Improper/wrong/null values inserted in place of the actual values

2. Critical Functionality Defects:

The occurrence of these bugs hampers the crucial functionality of the application l functionality of the application. Examples: - Exceptions

3. Functionality Defects: These defects affect the functionality of the application.

Examples:

- All JavaScript errors
- Buttons like Save, Delete, Cancel not performing their intended functions
- A missing functionality (or) a feature not functioning the way it is intended to
- Continuous execution of loops 379 Types of Defect

4. Security Defects:

Application security defects generally involve improper handling of data sent from the user to the application. These defects are the most severe and given highest priority for a fix.

Examples: Authentications

- Accepting an invalid username/password Authorization: Accessibility to pages though permission not given
- User Interface Defects: As the name suggests, the bugs deal with problems related to UI are usually considered less severe.

5. User Interface Defects:

As the name suggests, the bugs deal with problems related to UI are usually considered less severe.
Examples:

- Improper error/warning/UI message
- Spelling mistakes
- Alignment problems

Q.26 Difference between priority and severity .

Parameters	Severity in Testing	Priority in Testing
Definition	Severity is a term that denotes how severely a defect can affect the functionality of the software.	Priority is a term that defines how fast we need to fix a defect.
Parameter	Severity is basically a parameter that denotes the total impact of a given defect on any software.	Priority is basically a parameter that decides the order in which we should fix the defects.
Relation	Severity relates to the standards of quality.	Priority relates to the scheduling of defects to resolve them in software.
Value	The value of severity is objective.	The value of priority is subjective.
Types	There are 5 types of Severities: Cosmetic, Minor, Moderate, Major, and Critical.	There are 3 types of Priorities: High, Medium, and Low.

Q.27 Difference between SDLC & STLC

SDLC	STLC
Development Life Cycle	Testing Life Cycle
The main object of SDLC life cycle is to complete successful development of the software including testing and other phases.	The only objective of the STLC phase is testing.

In SDLC the business analyst gathers the requirements and create Development Plan	In STLC, the QA team analyze requirement documents like functional and non-functional documents and create System Test Plan
In SDLC, the development team creates the high and low-level design plans	In STLC, the test analyst creates the Integration Test Plan
The real code is developed, and actual work takes place as per the design documents.	The testing team prepares the test environment and executes them
SDLC phase also includes post-deployment supports and updates.	Testers, execute regression suits, usually automation scripts to check maintenance code deployed.