1. **What is Exploratory Testing?**
   Though the current trend in testing is to push for automation exploratory testing is a new Way of thinking Automation has its limits.
   Is not a technique but it is an approach. What action you perform next is governed by What you are doing currently.
   Is cognitively structured as structured as compared to the procedural structure of Scripted testing. This structure comes from charter time boxing etc.
2. **What is traceability matrix?**
   To protect against changes you should be able to track back from every system component to the original requirement that caused it's presence.
3. **What is Boundary value testing?**
   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
4. **What is Equivalence partitioning testing?**
   Equivalence partitioning is technique that divides the input domain of a system into Partitions or classes that are expected to produce the same output or behavior.
   For example,
   If a system accepts an integer between 1 and 100 as input, you can create four partitions: 1-10, 11-50, 51-99 and 100. Each partition represents a set of equivalent values that should Trigger the same response from the system. You can select one value from each partition as A test case, rather than testing all 100 values.
5. **What is 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.
6. **What determines the level of risk?**
   Test Planning in STLC is a phase in which a Senior QA manager determines test plan Strategy along with efforts and cost estimates for the project.
   Moreover, the resources, test environment, test limitation, and the testing schedule Are also determined.
7. **What is Alpha testing?**
   It is always performed by the developers at the software development Site.
   Sometimes it is also performed by Independent Testing Team.
   Alpha Testing is not open to the market and public
   It is always performed in Virtual Environment.

Alpha Testing is definitely performed and carried out at the developing Organizations location with the involvement of developers

8. **What is beta testing?**

   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 performed in Real Time Environment.
   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.

9. **What is component testing?**

   The testing of individual software components.

10. **What is functional system testing?**

    Testing based on an analysis of the Specification of the functionality of a component or system.

11. **What is 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?**

    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.

13. **What is Adhoc testing?**

    Adhoc testing is an informal testing type with an aim to break the System.
    This testing is primarily performed if the knowledge of testers in the System under test is very high.

14. **What is load testing?**

    Load testing is a kind of performance testing which determines a system's Performance under real-life load conditions.
    It's 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.

15. **What is stress Testing?**

    System is stressed beyond its specifications to check How and when it fails.
    Performed under heavy load like putting large Number beyond storage capacity, complex database queries, Continuous input to system or database load.
    Stress testing is used to test the stability & reliability of the system.

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

- Types of white box testing
  Unit testing
  Integration testing

17. **What is black box testing? What are the different black box testing techniques?**
    Testing, either functional or non-functional, Without reference to the internal structure of the component Or system.
    The technique of testing without having any knowledge of the Interior workings of the application is Black Box testing.
    Specification-based testing technique is also known as 'black-box'.
    - Black box testing techniques
      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?**
    Defects into three main categories: minor, major, and critical.
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.
    The major disadvantage is that in general it is time consuming and Difficult to trace the cause of failures because of this late integration.
20. **What is the purpose of exit criteria?**
    Purpose of exit criteria is to define when we STOP testing either at the: End of all testing – i.e. product Go Live
    End of phase of testing (e.g. hand over from System Test to UAT)
21. **When should "Regression Testing" be performed?**
    It is performed when the software Or its environment is changed.
22. **What is 7 key principles? Explain in detail?**
    - Testing shows presence of Defects

Testing can show that defects are present, but cannot prove that there are no 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.
However Testing cannot prove that there are no defects present.

- Exhaustive Testing is Impossible!
  Testing everything including all combinations of inputs and preconditions is not Possible.
  So, instead of doing exhaustive testing we can use risk and priorities to focus testing Efforts.
- Early Testing
  Testing activities should start as early as possible I 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
- 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'
- 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.
- Testing is Context Dependent
  Testing is basically context dependent.
  Testing is done differently in different contexts.
  Different kinds of sites are tested differently.
- Absence of Errors Fallacy
  Even after defects have been resolved it may still be unusable and/or Does not fulfil the users' needs and expectations.

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

Quality Assurance	Quality Control	Tester
Activities which ensure the implementation of	Activities which ensure the verification of developed software with respect to	Activities which ensure the identification of

processes, procedures and standards in context to verification of developed software and intended requirements.	documented requirements	bug/error/defects in the Software.
Focuses on processes and procedures rather than conducting actual testing on the system.	Focuses on actual testing by executing Software with intend to identify bugs/defect through implementation of procedures and process.	Focuses on actual testing.
Process oriented activities .	Product-oriented activities.	Product-oriented activities
Preventive activities.	It is a corrective process.	It is a preventive process.
It is a subset of software Test live cycle	QC cab be considered as the subset of Quality Assurance.	Testing is the subset of Quality Control

24. Difference between Smoke and Sanity?

Smoke testing	Sanity testing
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
This testing is performed by the developers or testers	Sanity testing is usually performed by testers
Smoke testing is usually documented or scripted	Sanity testing is usually not documented and is unscripted
Smoke testing exercises the entire system from end to end	Sanity testing exercises only the particular component of the entire system
Smoke testing is like General Health Check up	Sanity Testing is like specialized health check up

25. 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 ensure that work products meet their specified requirements.	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 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

26. Explain types of Performance testing.

- Load testing
  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.
- Stress testing
  System is stressed beyond its specifications to check How and when it fails. Performed under heavy load like putting large Number beyond storage capacity, complex database queries, Continuous input to system or database load.
  Stress testing is used to test the stability & reliability of the system.
- Endurance testing

- Spike testing
- Volume testing
- Scalability testing

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

    "A mistake in coding is called error, error found by tester is Called defect, defect accepted by development team then it is Called bug, build does not meet the requirements then it is Failure"

28. **Difference between Priority and Severity**

Priority	**Severity**
Priority is Relative and Business-Focused. Priority defines the order in which we should resolve a defect.	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.

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."

30. **Explain the difference between Functional testing and 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	Non-Functional testing checks the 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
Easy to do manual testing	Tough to do manual testing
Functional testing describes what the product does	Nonfunctional testing describes how good the product works
Types of Functional testing are Unit Testing Smoke Testing Sanity Testing Integration Testing White box testing Black Box testing User Acceptance testing (UAT) Regression Testing	Types of Nonfunctional testing are Performance Testing Load Testing Volume Testing Stress Testing Security Testing Installation Testing Penetration Testing Compatibility Testing Migration Testing

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

SDLC	**STLC**
SDLC is mainly related to software Development	STLC is mainly related to software testing
Besides development other phases like testing also included	It focuses only on testing the software.
SDLC involves a total six phases or steps.	STLC involves only five phases or steps.
In SDLC , more number of members	In STLC, less number of members (testers) are needed.

(developers) are required for the whole process	
Goal of SDLC is to complete the successful Development of software.	Goal of STLC is to complete the successful testing of software.
It helps in developing good quality Software.	It helps in making the software defects-free.

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

Test scenarios	**Test cases**	**Test cases**
Is any functionality that can be tested.	Is a set of actions executed to verify particular features or functionality.	Is a set of instructions to test an app automatically
Is more focused on what to test.	Is focused on what to test and how to test	Is focused on the expected result.
Helps test the end-to-end functionality in an Agile way	Help in exhaustive testing of an app.	Helps to test specific things repeatedly.
Includes an end-to-end functionality to be tested.	Includes test steps, and data expected results for testing.	Includes different commands to develop a script
The main task is to check The full functionality of a Software application.	The main task is to verify compliance with the applicable standards, guidelines and customer requirements.	The main task is to verify that nothing is skipped, and the results are true as the desired testing plan.

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

A test plan is a document that consists of all future testing -related activities. It is Prepared at the project level and in general , it defines work products too be tested , how They will be tested , and test type distribution among the testers.

34. What is priority?

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 fix the defect. If high-priority status is set based on the Customer's requirements.

35. **What is severity?**

    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.

36. **Bug categories are...**

    Software bugs can be classified into multiple categories based on their nature and impact. Broadly speaking, these categories include Function Bugs , Logical Bugs, Workflow Bugs, Unit Level bugs, System-Level integration Bugs, out of Bound Bugs , and Security bugs.

37. **Advantage of Bugzila .**

    It improves the quality of the product. It enhances the communication between the Developing team and the testing tea. It has the capability to adapt to multiple situations.

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

    - Kanban
    - Scrum
    - Extreme Programming
    - Crystal
    - Dynamic Systems Development Method
    - Feature – Driven Development

39. **Difference between priority and severity.**

Priority	**Severity**
Priority is Relative and Business-Focused. Priority defines the order in which we should resolve a defect	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

1. **Explain the difference between Authorization and Authentication in Web testing. What are the common problems faced in Web testing?**

   Authentication is the process of verifying who someone is , whereas authorization is the Process of verifying what specific application, files, and data a user has access

to. The Situation is like that of an airline that needs to determine which people can come on board. The common problems faced in web testing is
Ensuring cross browser compatibility.

HLR AND TEST CASES LINK :

https://docs.google.com/spreadsheets/d/1EuKT30SZTbC5vdaWM21gXOXLmIo9WY5WFV0rgoJ8ZB4/edit?usp=drivesdk

TEST SCENARIO LINK :

https://docs.google.com/spreadsheets/d/1R6V7J9q3jllvQxGFUS7hWHmlUXeWX0JKAva4LxhtcQ0/edit?usp=drivesdk