

# *Interview Questions*

## **1. What are your roles and responsibilities as a tester?**

- A tester has a test to break the application, an ability to take the point of view of the customer, a strong desire for quality, and an attention to detail.
- 1a. Explain in the pre-testing phase, acceptance testing and testing phase.
  - Pre-testing phase – Review the requirement document, setting up MR tool, writing the Test Plan, collecting the test data, installing the test automation tool, setting up the database, web browser, web server.
  - Acceptance testing – Tasks in the acceptance testing phase are checking the product test entrance criteria and conducting basic feature tests for the product.
  - Testing phase - The tasks in the testing phase include running the tests from Test Plan, entering bugs on the MR tool, working with the developers to resolve the bugs, running regression tests, collecting test metrics, and estimating if the test effort is following schedule in the Master Test Plan.

## **2. Explain Software development life cycle**

- Marketing require
- Business require
- System require
- Analysis – high level – detail design, coding/ unit testing/ integration testing/ system testing/ user acceptance/ product problem solutions.

## **3. What is the master test plan? What is contains? Who is responsible for writing it?**

- A master plan is a test strategy document, it is based on quality method of operations
- It contains details of test environment: hw/sw and operation system; MR tools; timeliness; hr resources, testers, kill stes, assignment of priorities, cycles of testing; entrance & exit criteria for each phase of testing; code migration from development environment to test environment; budget, automation testing- which tool for regression test and performance test.
- Test leader or test manager is responsible for writing it.

## **4. What is test plan? Who is responsible for writing it? What is contains?**

It is a document describes the objectives, scope, approach & focus of a software testing effort; testing priorities, scope of testing, objective of testing, test environment-hw, s/w, tools, personnel; test cases to test different requirement & defines what to test; precond data that defines data require to test for this case; test procedure that defines how to test the case; data input – test data scenario specific.

Tester is responsible for writing the test plan

It contains: title, software version, db requirement, test tools, requirement #, test case; Test pre condition, Test procedures; Expected result; actual result; defect ID, Remarks-pass/fail

## **5. What different type of test cases you wrote in the test plan?**

- **Test case is a document that describes an input action or event & an experience** response
- Test cases are written in test plan to test the applications features: functionality, html link s testing, XM testing, CGI component testing; and test usability of application.
- Functional cases to test limits of input, output, table, files; test cases to test the storage capacity of the system; test performance of the application under load conditions, scenarios for stress testing; volume testing; security testing, recovery testing, installation testing, error testing, and configuration testing.

## **6. What are test drivers?**

Very simple program which accept data, execute software under test, store results, compare results with test drivers can be made in 4 test, WinRunner.

## **7. Why test plan is controlled document?**

After preparing a test plan a walkthrough is conducted with development team & system analyst only then

the test plan can go further hence it is a Controlled Document.

8. **What information you need to formulate test?**

Business procedure doc,

9. **What template you used to write test plan?**

Excel, Lotus Notes, Word document, and etc.

10. **What is MR (Modification Request)?**

- MR is a bug tracking tool thru which tester will communicate with others (dev team) in system and keep record of the history of defects; it is used to keep track of bugs; system management team can monitor progress of bug fixing; helps all to analyzes the software quality because thru this we will view how many severe bugs are coming from the test phase.

11. **Why you write MR?**

- To keep track of defects till resolved.

12. **What information it contains?**

Severity/due date/developer/ assigned to/ status/ release version/ platform/ module/ person responsible for fixing bug/ description of bug resolution.

13. **Give me few examples of the MRs you wrote.**

If you entered data on a field, & it crashed the application; you did not enter data in required field & the system let you go further Severity 1 MR-to be resolved within 24 hours.

14. **What is White Box/Unit testing?**

Based on knowledge of internal logic of an application codes; test based on coverage code statements.

Unit testing is the most micro scale of testing, it may require developer test driver modules or test harnesses.

White & unit testing are almost same; White box testing: thorough knowledge of code, examine internal design of program & requires that the tester has detailed knowledge of its structure, extreme testing (9/99999), exceptional cases (book return at bookstore –20% disc when purchased, when you return did they deduct 20%?), when unit test are done on a white box, they are essentially path tests, the idea is to focus on a relatively small segment of code & aim to exercise a high percentage of the internal paths, a path is a instruction sequence that threads thru the program from initial entry to final exit.

15. **What is integration testing?**

- Testing combined parts of the applications to determine if they function together correctly.

16. **What is black box testing?**

- Testing functionality of application of application from business point of view-user point of view

17. **What knowledge you require to do the white box, integration and black box testing?**

- White box – understand the program language and application procedures.
- Integration – requires detailed of product internals and understand the program language as well because tester need to combined all the units of the application to determine if they function together correctly.
- Black box - Just observing the output of the system

18. **How many testers were in the test team?**

- Depends on the project; the last project there were 10 testers a the beginning & alter dwindled to 6 at the end of the project. There were 2 automation and performance testers in project.

19. **What was the test team hierarchy?**

- Project Manager, QA lead, Design team, Business Analysis, and QA tester.

20. **Which MR tool you used to write MR?**

- Use MR tool to write MR, MR includes the type of error, the subsystem the error is related, the severity of an error, and a short description of the error; Lotus notes

21. **What is regression testing?**

Retesting of scenarios after fixing of MR from point of view of enhancements of software; retesting after fixes or modifications of soft ware or its environment.

22. **Why we do regression testing?**

Because it is important to verify that bug fixes did not break some other part of the system.

23. **How we do regression testing?**

- We use automation tool
- Must be one complete set of regression tests done for the entire product before it leaves system testing.
- Capture your tests and play them back whenever required.

24. **What are the different automation tools you know?**

- WinRunner, Silk, LoadRunner

25. **What is difference between regression automation tool and performance automation tool?**

- Regression automation tool can play back the scripts and adjust the speed play back; also it will test the functionality of application under single user load.
- Performance test tool main purpose is to create virtual users, put load on system, review time under load condition, do analysis of response time, generate reports & graphs, monitor server resources under load condition.

26. **What is client server architecture?**

- All shared resources are present on a server machine, client machine use the resources on server: files, printers c/s architecture is good for scalability with inc # of users; scalability is done horizontally(clients) & vertically (disk memory)
- Client: a computer that requests service
- Server: a computer that provides the service
- In a network, the client/ server model provides a convenient way to interconnect programs that are distributed efficiently across different locations.

27. **What is three tier and multi-tier architecture?**

**Presentation server (gui), db server (data), application server logic.**

**Multi tier – many servers, www –web server, application server, database server, gateway, legacy server**

28. **What is Internet?**

The Internet, sometimes called simply "the Net," is a worldwide system of computer networks - a network of networks in which users at any one computer can, if they have permission, get information from any other computer (and sometimes talk directly to **users at other computers**).

29. **How Intranet is different from client-server?**

- Intranet – GUI resides on server, we use browsers html, Java applets (executable codes written for web in Java), shareable
- C/S- GUI is client specific not shareable

30. **What is different about Web Testing than Client Server Testing?**

- Web – navigation not well defined; needs a lot of testing; # of users not predictable therefore performance test is an issue; an environment is unknown; use of URL's hyperlinks.
- Client/Server – navigation is well defined; # of users known; environment is known; navigation is thru menu or push button.

31. **What is byte code file?**

32. **What is an Applet?**

- An applet is a program written in the Java programming language that can be include in a HTML page, much in the same way an image is included.

33. **How applet is different from application?**

- No html file needed in application to run; application contains main class;
- Stand alone programs are called Java applications (console applications, windowed Java application's)
- Java application contains main class, independent application; not embedded in html code.

34. **What is Java Virtual Machine?**

- Gives you additional tools for solving programming problems in Java
- Is the software implementation of a "CPU" designed to run and compiled Java code.

**35. What is ISO-9000?**

Here's how it works. You decide that you need to develop a quality system that meets the ISO-9000 standards. You choose to follow this path because you feel the need to control the quality of your products and services, to reduce the costs associated with poor quality, or to become more competitive, or you choose this path simply because your customers expect you to do so or because a regulatory body has made it mandatory.

**36. What is QMO?**

- QMO is a set of process and guidelines that software systems project must follow to comply with ISO-9001
- Contains 7 phases
  - Initiate the project
  - Design the system
  - Build the system
  - Test the system
  - Deploy the system
  - Support the system

**37. What are the different phases of software development cycle?**

- **Project proposal initiate/requirement analysis/ function specification & design/ develop/document preparation/integration testing/ test/user acceptance testing/production rollout/ support & maintenance /updates/retesting.**

**38. How do help developers to track the faults is the software?**

- By conducting different test cases for same features using different combinations of data.
- Use your imagination and ask, "How can I break the system? And use some positive and negative scenarios.

**39. What are positive scenarios?**

- Testing the program the way its designed to work.

**40. What are negative scenarios?**

- Invalid data, sequence, objects, syntax, limits, and invalid configuration parameters.

**41. What are individual test cases?**

An individual test is for single feature or requirement

**42. What are workflow test cases?**

Those scenarios which verify the related features of sequence in application which correspond to a unit of work: by creating quotation, creating order, shipping order, billing order, posting the payment.

Workflow tests involve a large number of areas than individual tests. Testing workflow too early may be inefficient if many problems are found and that requires entire workflow to be re-tested. Therefore mix workflow scenarios with individual tests.

**43. If we have executed individual test cases, why we do workflow scenarios?**

- Individual test cases focus on individual features, we should test related sequence of features to find errors when cases are mixed.

**44. What is object-oriented model?**

- Allow reusability of code; blueprint is defined using classes & then you create objects for those classes. You can create many subclasses, which can inherit method & properties of the super classes. In OOM data is hidden/encapsulated within object, therefore calling its method only can change its data, then object will change its own data.

**45. What is procedural model?**

- Flow is top down, data is in 1 section, commands in another section; waterfall technology; in object oriented it is multi directional.

#### 46. What is an object?

- In object-oriented programming, objects are the things you think about first in designing a program and they are also the units of code that are eventually derived from the process. In between, each object is made into a generic class of object and even more generic classes are defined so that objects can share models and reuse the class definitions in their code. Each object is an instance of a particular class or subclass with the class's own method or procedures and data variable. An object is what actually runs in the computer.

#### 47. What is class?

An object is defined via its **class**, which determines everything about an object

- In object-oriented programming, a class is a template definition of the method and variable in a particular kind of object. Thus, an object is a specific instance of a class; it contains real values instead of variables.
- The class is one of the defining ideas of object-oriented programming. Among the important ideas about classes are:
- A class can have subclasses that can inherit all or some of the characteristics of the class. In relation to each subclass, the class becomes the superclass.
- Subclasses can also define their own methods and variables that are not part of their superclass.
- The structure of a class and its subclasses is called the class hierarchy.

#### 48. What is encapsulation? Give one example

In general, encapsulation is the inclusion of one thing within another thing so that the included thing is not apparent. Decapsulation is the removal or the making apparent a thing previously encapsulated.

In object-oriented programming, encapsulation is the inclusion within a program object of all the resources need for the object to function - basically, the method and the data. The object is said to "publish its interfaces." Other objects adhere to these interfaces to use the object without having to be concerned with how the object accomplishes it. The idea is "don't tell me how you do it; just do it." An object can be thought of as a self-contained atom. The object interface consists of public methods and instantiated data.

2) In telecommunication, encapsulation is the inclusion of one data structure within another structure so that the first data structure is hidden for the time being. For example, a TCP/IP-formatted data packet can be encapsulated within an asynchronous transfer mode frame (another kind of transmitted data unit). Within the context of transmitting and receiving the ATM frame, the encapsulated packet is simply a stream of bits between the ATM data that describes the transfer.

#### 49. What is inheritance? Give example

- In object-oriented programming, inheritance is the concept that when a class of object is defined, any subclass that is defined can inherit the definitions of one or more general classes. This means for the programmer that an object in a subclass need not carry its own definition of data and methods that are generic to the class (or classes) of which it is a part. This not only speeds up program development; it also ensures an inherent validity to the defined subclass object (what works and is consistent about the class will also work for the subclass).

#### 50. What is Polymorphism? Give example

- In object-oriented programming, polymorphism (from the Greek meaning "having multiple forms") is the characteristic of being able to assign a different meaning to a particular symbol or "operator" in different contexts.
- For example, the plus sign (+) can operate on two objects such that it adds them together (perhaps the most common form of the + operation) or, as in boolean searching, a + can indicate a logical "and" (meaning that both words separated by the + operator must be present in order for a citation to be returned). In another context, the + sign could mean an operation to concatenate the two objects or strings of letters on either side of the + sign.

- A given operator can also be given yet another meaning when combined with another operator. For example, in the C++ language, a "++" following a variable can mean "increment this value by 1". The meaning of a particular operator is defined as part of a class definition. Since the programmer can create classes, the programmer can also define how operators work for this class of objects; in effect, the programmer can redefine the computing language.

**51. What are the different types of MRs?**

- There are several types of MRs. The most common ones are a) SOFTWARE -when you find a bug in the software b) DOCUMENTATION - when the installation guide or the learning support material is wrong c) CONFIGURATION - when the system fails due to the bad or missing configuration parameters, d) ENHANCEMENTS - when a tester has a suggestion on improving a specific feature.

**52. What is test Metrics?**

- Measuring tool (template prepared in excel) during execution phase: total # of test cases; # of test cases executed so far; # of test cases passed; # of test cases failed; # of test cases deferred to next released;
- Measures the quality of the product

**53. What is the use Metrics?**

- The test metrics required by QMO are:
  - Total tests
  - Tests run
  - Tests passed
  - Tests failed
  - Tests deferred
  - Tests passed the first time.

**54. How we decide which automation tool we are going to use for the regression testing?**

- Planning of test strategy on how to automate the testing. Which test cases will be executed for regression testing. Not all the test cases will be executed during regression testing.
- Which test cases are worth automating. Some test cases require more time to automate than to execute manually due to the type of objects on the window e.g custom objects, drawing objects, etc.

**55. What is the impact of environment of the actual results of performance testing?**

Environment plays a role in the results of the tests. Particularly in the areas of performance testing.

Some of the areas you cannot control

- Other traffic on the network
- Other processes running on the server
- Other processes running on the DBMS

**56. What is the Stress testing, Performance testing, Security testing, Recovery testing and Volume testing?**

- **Stress testing** - Its goal is to demonstrate that the program is not able to handle huge amounts of data, although it has been developed for this (this is especially necessary for real time systems).
- **Performance** - Timings for both read and update transactions should be gathered to determine whether system functions are being performed in an acceptable timeframe. This should be done in stand-alone, and in multi-user environment; We test under load condition that server doesn't crash, we test that functionality doesn't break, we test response time of system under load conditions, performance tuning & testing of abap/4 program & function modules.

**Security** - The system should be secure from authorized use and unauthorized data access; should be confidential, integrated, availability; outsiders cannot view, edit or delet data, system is secure from hackers, test a t 3 levels; whether internet protocols are secure; encryption & decryption, SSL, digital certificates.

**Recovery** – A system should be tested to see how it responds to errors and abnormal conditions such as: system crash loss of device, communication, and power; after system crashes we can recover gracefully, we don't lose data, no duplicate records, no broken records, no gaps or bad data.

**Volume** - Large volume of data should be fed to the system to make sure it can correctly process such amount. Systems can often respond unpredictably when large volume causes files to overflow.

**57. What are criteria you will follow to assign severity and due date to the MR?**

- If bug you find in application halts your testing then you cannot move on or breaks system – it is of severity 1 & assign highest priority & due date of 24 hours; if the bug doesn't halt the system but it is critical to the business then assign severity 2, it should be fixed within this release but you will assign due date by negotiating with developer, after bug is fixed & you've tested the bug you've to do the regression testing.

**58. What is user acceptance testing?**

- When the product enters System Test, it has completed Integration test and must meet the Integration test exit criteria.
- Check Integration exit criteria and product test entrance criteria in the Master Test Plan or Test Strategy document.
- Make sure all defects are found in functional / integration/ regression testing

**59. What are build, version, and release?**

When different modules of application are linked together (5 modules of application). Build 1//When all fixes of bug in Build 1 –Build 2 Version –a any minor changes to software.

**60. What are the entrance and exit criteria in the system test?**

- The entrance/exit criteria into and out of each testing phase is written in the Master Test Plan.
  - System Test Entrance Criteria
    - Integration test exit criteria have been successfully met
    - All installation documentation is completed.
    - All shippable software has been successfully built.
    - System Test Plan is baselined by completing the walkthrough of the test plan.
    - Test environment should be setup.
    - All severity 1 MRs of integration test phase should be closed.
  - **System Test Exit Criteria**
- All the test case in the test plan should be tested.
- All the test cycle should be executed
  - All MRs or problems are closed, rolled, or deferred.
  - Regression testing cycle should be executed after closing the MRs.
  - All documents are reviewed, finalized and signed-off
- Any problem areas that require fix or under investigation are included in the current release.

**61. What are the roles of Test Team Leader?**

Team leader is responsible for formulating master test plan, decide test environment, collection of master data, keeping track of testing schedules, make sure all actions are completed within timelines, testes have conducted WAK of test plans, manage effort of software transport from development to environment, attend MR meetings, make sure MR's are fixed within time lines, responsible for sharing test metrics with other team members, resource identification & allocation, budget, defect tracking repository.

**62. What are the roles of Sr. Test Engineer?**

- Sr. Test Engineer should know the entire process of the application and the procedure of testing the application. Besides, must be system analysis & design.]

**63. How do you decide what functionality's of the application are to be tested?**

- Go with requirement document
- Always test at the beginning of the application.

**64. If there are no requirements, how will you write your test plan?**

Review design document, schedule meeting with developers, system design people & construct test case; Consider using test cases as a means of documenting the systems behavior, users can review test cases – is this what we want to happen, developers use test cases as a checklist for - what they must build, what they should test before release.

**65. What is smoke testing?**

- Go different application and check in a quick format.

**66. What is soak testing?**

Require automated scripts

During infrastructure testing, automation testing of the server CGI script can be left running

Check out response to failures

**67. What is a pre-condition data?**

Data required to setup in the system before the test execution; for example, Master data which should be present in application to test the functionality of application, example – products in GMO application you cannot drive the application without this....example – for deleting an order you need an existing order, you need pricing information before booking a flight.

**68. What are the different documents in QA?**

- Test plan, master test plan, URD/BRD/FRD/DDD/TSD OR SSD (User requirement, bus req, func req, det des, tech spec/system spec) RTS – review tracking sheet.

**69. How do you rate yourself in software testing?**

I think I have skills and necessary experience to do an outstanding job.

**70. With all the skills, do you prefer to be a developer or a tester? And why?**

- My strength are in QA, mgt. skills & would like to being test team lead position; testing gives more exposure to systems, development, detailed knowledge of a particular area, as a tester you are also a developer because you develop automated scripts.

**71. What are the best webs sites that you frequently visit to upgrade your QA skills?**

- Mercury interactive. Com, sqe.com, sunguru.com

**72. Are the words “Prevention” and “Detection” sounding familiar? Explain.**

- Error Detection rate are:
  - 100 test ran first day and 400 next day
  - 10 error first day and 20 next day
  - error detection rate 10% for the first day and 5% of the next day
  - Quality assurance deals with monitoring & Software quality assurance deals with prevention.
  - Detection – tester will detect the bugs; prevention – developer
  - QA deals with guidelines, standards, methodology, and configuration mgt.

**73. Is defect resolution a technical skill or interpersonal skill from QA viewpoint?**

- Interpersonal skill

**74. Can you automate all the test scripts? Explain**

- No, it is not possible to automate all the test scripts. Routine & repetitive tasks can be automated; can automated scripts which are eligible for regression testing, where there is repetition involved.

**75. What is End to End business logic testing?**

- End-to-End verification of business process or point to point: business logic (start to end); doing a business process XN from end to end; (QTC –qt, order, ship, inv/billing, post to ledger).

**76. Explain to me about a most critical defect you found in your last project?**

- PNC bank online application form – when a mandatory field was not filled in the form was still processed.

## **Interview question #2**

**1. What is E-commerce?**

E-commerce (electronic commerce or EC) is the buying and selling of goods and services on the Internet, especially the World Wide Web. In practice, this term and a new term, "[e-business](#)," are often used interchangeably. For online retail selling, the term [e-tailing](#) is sometimes used.

**2. Give example of E-commerce application?**

E-commerce can be divided into:

- E-tailing or "virtual storefronts" on Web sites with online catalogs, sometimes gathered into a "virtual mall"
- The gathering and use of demographic data through Web contacts
- Electronic Data Interchange ([Electronic Data Interchange](#)), the business-to-business exchange of data
- [e-mail](#) and [fax](#) and their use as media for reaching prospects and established customers (for example, with newsletters)
- Business-to-business buying and selling
- The security of business transactions

**3. Explain the business process of the Great Deals applications?**

Provide online access to trade on stocks online in London Stock Exchange – requirement goes thru gateway server, can view price of stock, can sell stock, set quantity limits. Tech description, design, browser, web server, gateway server, customer acct, and price.

**What are CIG (common gateway interface)**

- The common gateway interface (CGI) is a standard way for a Web [server](#) to pass a Web user's request to an application program and to receive data back to forward to the user. When the user requests a Web page (for example, by clicking on a highlighted word or entering a Web site address), the server sends back the requested page. However, when a user fills out a form on a Web page and sends it in, it usually needs to be processed by an application program. The Web server typically passes the form information to a small application program that processes the data and may send back a confirmation message. This method or convention for passing data back and forth between the server and the application is called the *common gateway interface (CGI)*. It is part of the Web's [Hypertext Transfer Protocol](#)

**6. What is API (application program interface)**

- An API (application program interface) is the specific method prescribed by a computer [operating system](#) or by another [application](#) program by which a programmer writing an application program can make requests of the operating system or another application.

An API can be contrasted with a [graphical user interface](#) or a *command interface* (both of which are direct *user interfaces*) as interfaces to an operating system or a program.

## 7. What is Internet?

The Internet, sometimes called simply "the Net," is a worldwide system of computer networks - a network of networks in which users at any one computer can, if they have permission, get information from any other computer (and sometimes talk directly to users at other computers).

## What is Intranet?

An intranet is a private network that is contained within an enterprise. It may consist of many interlinked error, invalid term and also use leased line in the wide area network. Typically, an intranet includes connections through one or more gateway computers to the outside Internet. The main purpose of an Intranet is to share company information and computing resources among employees. An Intranet can also be used to facilitate working in-groups and for teleconferences.

## What is Extranet?

- An extranet is a private network that uses the Internet protocol and the public telecommunication system to securely share part of a business's information or operations with suppliers, vendors, partners, customers, or other businesses. An extranet can be viewed as part of a company's Intranet that is extended to users outside the company. It has also been described as a "state of mind" in which the Internet is perceived as a way to do business with other companies as well as to sell products to customers. The same benefits that HTML, Hypertext Transfer Protocol, Simple Mail Transfer Protocol, and other Internet technologies have brought to the Internet and to corporate intranets now seem designed to accelerate business between businesses

## What are firewalls?

A firewall is a set of related programs, located at a network [gateway server](#), that protects the resources of a private network from users from other networks. (The term also implies the security policy that is used with the programs.) An enterprise with an [intranet](#) that allows its workers access to the wider Internet installs a firewall to prevent outsiders from accessing its own private data resources and for controlling what outside resources its own users have access to.

## 9. What is HTML?

HTML (Hypertext Markup Language) is the set of "[markup](#)" symbols or codes inserted in a file intended for display on a World Wide Web [browser](#). The markup tells the Web browser how to display a Web page's words and images for the user. The individual markup codes are referred to as elements (but many people also refer to them as [tag](#)).

## What is XML

XML (Extensible Markup Language) is a flexible way to create common [information](#) formats and share both the format and the [data](#) on the World Wide Web, intranets, and elsewhere. For example, computer makers might agree on a standard or common way to describe the information about a computer product (processor speed, memory size, and so forth) and then describe the product information format with XML. Such a standard way of describing data would enable a user to send an intelligent agent (a program) to each computer maker's Web site, gather data, and then make a valid comparison. XML can be used by any individual or group of individuals or companies that wants to share information in a consistent way.

## What is DHTML?

It refers to the web pages that appears to behave dynamically after the Web Page is downloaded by the browser.

### What is HTTP? (Hypertext transfer Protocol)

The HTTP protocol was originally developed to reduce the inefficiencies of the FTP protocol [www], [ftp]. The goal was fast request-response interaction without requiring state at the server. To see the performance advantage of HTTP over FTP, we can compare the process of file retrieval transactions in each protocol. Both protocols use a reliable, connection-oriented transport protocol, TCP [tcp].

### What is SSL (Secure Socket Layer)

A security protocol that provides privacy over the Internet. The protocol allows client/server applications to communicate in a way that cannot be eavesdropped. Servers are always authenticated and clients are optionally authenticated.

### 14. Explain the process of electronic payment (SET)

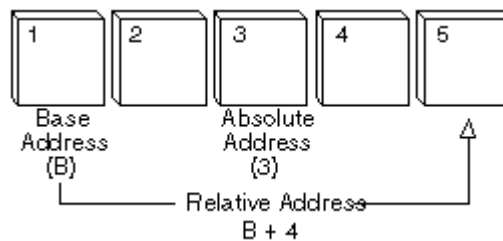
Electronic Payments refer to financial transactions that are made without the use of paper documents, such as checks or sharedrafts. Direct Deposit of Payroll is the most familiar electronic payment. Automated Payments, such as pre-authorized direct payments, telephone bill payments, PC banking and point-of-sale or debit card transactions are being used by more consumers everyday.

### 15. What do you verify in Navigational testing?

- See if you can move between each window by initiating any of the functions from any other appropriate window in the system. This should be done without necessarily performing any detailed processing when there.

### 16. What is absolute address?

A fixed address in memory. The term absolute distinguishes from relative address, which indicates a location by specifying a distance from another location. Absolute address are also called real addresses and machine addresses..



### 17. What is a relative address?

- An address specified by indicating its distance from another address called the base address. For example, a relative address might be B+15, B being the base address and 15 the distance (called the offset).

### 18. Why do web server gives ERROR 404? (File Not Found!)

The annoying little reminders that either someone has miswritten the URL, deleted the file you are looking for, or the net spirits are against you and will see to it you will never find the information you are looking for.

### 19. What is cookies?

Cookies are bits of information that your browser picks up and carries around with it internally. These bits of information can be read and changed by a site and make it possible to identify people (or more accurately browsers) who have been to your site before.

### 20. What is Plug-in?

For the developers, that's a tingling food for thought. And to think that its not so unaffordable afterall, is another great news. You simply have to let your browser know how to do it. When we say 'browser', we mean the popular **Netscape** . The *letting the browser know* means we will be using **Microsoft Visual C++** to befriend the browser. This program that introduces Netscape to the various file extensions and how to handle these files is called a **plug-in** .

**21. What is broken links?**

**Broken Links** reviews web sites from the end users perspective. We give you an unbiased analysis of your site with suggestions to increase site optimization. Increasing search engine rankings, decreasing load times, removing outdated time sensitive information, verifying email response time, etc

**22. What are the reasons of having broken links?**

**Broken Links** has developed a systemic approach to review your site. It can answer the question: Do end-users experience what you expect?

**23. What is JPEG?**

- JPEG is short for the 'Joint Photographic Experts Group'. This was (and is) a group of experts nominated by national standards bodies and major companies to work to produce standards for continuous tone image coding. The 'joint' refers to its status as a committee working on both ISO and ITU-T standards. The 'official' title of the committee is ISO/IEC JTC1 SC29 Working Group 1, and is responsible for both JPEG and JBIG standards.
- The best known standard from JPEG is IS 10918-1 (ITU-T T.81), which is the first of a multi-part set of standards for still image compression. A basic version of the many features of this standard, in association with a file format placed into the public domain by C-Cube Microsystems (JFIF) is what most people think of as JPEG! Hopefully this site will improve your knowledge of the real work of the JPEG committee.

**24. What is GIF?**

- Is a graphical Interface Format, using images for the Internet animation.

**25. What is a Java Applet?**

- An applet is a program written in the Java programming language that can be included in an HTML page, much in the same way an image is included. When you use a Java technology enabled browser to view a page that contains an applet, the applet's code is transferred to your system and executed by the browser's Java Virtual Machine (JVM).

**26. How will you do the functional testing of the web application?**

Ensure e-commerce applications work as expected.

**27. What internationalization testing is required for the e-commerce application?**

- Functional Testing Products: Ensure e-commerce applications work as expected.
- Load Testing Products: Stress test e-commerce applications under real-world conditions to predict systems behavior and performance and to identify and isolate problems.
- Test Process Management Products: Organize and manage the testing process to determine application readiness.
- Web Performance Monitoring Products: Monitor Web applications in real time and alerts operations groups of performance problems before users experience them.
- Hosted Web Performance Monitoring Service: Proactively monitor sites in real time.
- Hosted Load Testing Service: Identify bottlenecks and capacity constraints before your site goes live.

**28. If you have to test under the squeezed time line, what strategy you will follow to test the system**

1. Use risk analysis to determine where testing should be focused?
  - Which functionality is most important to the project intended purpose?
  - Which functionality is most variable to the user?
  - Which functionality has the largest safety impact?
  - Which aspects of the applications are most important to the customer?

**29. If there are no requirements, how will you write your test plan?**

- Review design doc, schedule meeting with developers, system design people & construct test case.

**30. What is manual testing?**

- Time consuming
- Time reliability
- Human resource
- Time consistent

**31. What is automated testing?**

- Speed
- High reliability
- Coverage
- Repeatedly
- Reusability
- Programming
- Capabilities

Testing tools automate the process of testing and can save a large amount of time. In contrast, manual testing a large amount of time is required and in accuracy.

**32. How will you test the server side programs?**

- ASP – front/back, JSP – Java server pages, servlets, CGI – programs

**33. What are the test drivers?**

- Very simple program which accept data, execute software under test, store results, compare results with Test drivers can be made in 4 test, WinRunner.

**34. What are the different risk areas?**

- Under our control / not under our control
- Functionality – configuration of browsers, h/w, s/w, o/s, plugging, cookies
- Reliability/availability - crash not work
- Usability – user friendly, users, are not trained doc
- Performance – infinite users, accessing site concurrently
- Security – open to all, exposure to risk

**35. What if no requirements?**

- Schedule meetings and talks with developers, designers, and users to better understand how the system is used and what functionalities need to be tested. I will try to understand the business process as much as possible by creating process flow diagrams and data flow diagrams that show how the system interacts and works. I will walkthrough the entire application and write test plan and conduct the walkthrough of the test plan with the development teams. With my prior experience, I will analyze what kind of testing is needed, and design scenarios and execute test cases.

**36. Conflict with developers, how to resolve?**

- Developers and testers have a cordial team relationship and both work towards a common goal. We both have contradicting roles, developers build software, testers break software. Before issuing an MR to the developer, I will first try to troubleshoot the problem on my end. The problem might not be a bug; it might be a misunderstanding of the requirements from my point of view. It could also be a data or environment problem. Only then will I record the bug in the defect-tracking tool and create log files, reports and screen-prints as well as write a resolution for the bug, so that I keep a trailing history of the bug.

### **37. Work ethics?**

- I am a detail oriented person and a strong team player. As a QA engineer, I shoulder a major responsibility, because I validate the software for users to use, I am accountable for any more bugs cropping up after the application has been put into production. I also share information with other team members and assist others.

### **38. Functional testing?**

- Based on the requirements document, it is testing the functionality of all the objects on a page or form. Testing of individual component/module, linked/related modules and then testing of end-to end functionality.

### **39. Regression testing?**

- It is retesting of scenarios after any changes of the code are made to make sure that the changes in previous builds have not affected other parts of the application.

### **40. Unit testing?**

- Testing each unit, path tests, by focusing on a relatively small section of code and trying to exercise a high percentage of the internal paths, internals of the code.

### **41. Web page / GUI testing?**

- First test the basic functionalities of the web page, the elements and objects on the page, and the time it takes for the page to load. Verify hyperlinks work and buttons execute transactions work. Perform browser page testing including testing the properties of the objects on the web page, input forms, field validations, data inputs, and required and optional fields.

### **42. How do you perform Testing of Web Screens?**

- When testing web pages/screen the tester should first test for the basic functionality of the web page. Starting with the looks and feel of the web page, centering and scaling of objects in the window, the cosmetic part of the page, the spelling, the alignment of the fonts against the background or images and how long before the web page displays completely.
- Traversing the links and verify do all the objects on a page load and do they load in acceptable time for images, audio files, video files, streamed audio and video, java applets and ActiveX controls. Verify internal and external links.
- Verify Hyperlinks and buttons that executes transactions.
- Perform browser page testing that includes testing the properties of the objects on the web page, input forms, field validations, data inputs, required and optional fields.
- When the basic functionality of the page has been considered as acceptable thorough testing of the web page should be done which include link test, data flow test, security and most of all the usability of the web page. Usability requires that the needs of the end user should be satisfied and prioritized.

### **43. What is Backend Testing?**

- Backend Testing is basically testing the data in the database using a utility or database language that can mine/retrieve data from the database being tested. SQL is one of the most common utility used for backend testing. End to end and data flow testing requires backend testing to prove that the correct data flows from start of the application process to the end.
- Executing the SQL queries to retrieve and manipulate data from the DB2 database. It includes select, inserts, delete update, (inner joins, outer join, group by, order by, cursors etc.)

#### **43. What is Functional testing?**

Functional Testing is testing the application on the functionality of the system or application being tested. Functionality testing can be more accurate if it is based on the requirements documentation. It can be broken down into various components like start with testing the functionality of individual component, individual module, linked modules and then end-to end functionality.

#### **44. What is System Testing?**

System Testing is testing the entire integrated systems from the business requirements point of view that includes testing the – functionality, usability and all the facilities of the entire system.

#### **45. What is Integration Testing?**

- Integration Testing is testing one unit of the application integrated with another unit of the application. Data and corresponding page/unit should flow properly in integration testing.
- In Integration testing we check the interface between different modules of the application.

#### **46. Tell some thing about Data Validation?**

Data validation testing is testing for data being driven or passed from unit to another. Backend testing is one of the data validations testing using SQL to test for data.

#### **47. What is User acceptance testing?**

User acceptance testing executing the user UAT test cases that constitutes the unit of work performed by the user and various business scenarios. UAT is performed first in the test environment then in the production environment.

#### **48. What is End to end testing?**

End-to-End Testing means testing the application from the start of a transaction to the end to constitute a unit of work that will be performed by the user.

#### **49. What is Test Coverage?**

Test Coverage means the scope of the testing effort on wide and how deep the test to be performed on application/system.

#### **50. What is Defect Tracking?**

Defect Tracking means during executions when actual results of the test cases does not match the expected results we log it as a defect to a defect tracking tools. We assign it a severity depending upon the severity of the bug. The objective of defect tracking is to provide information to stake holder of the defect found in the product and to establish a time line on who and when will the defect be resolved. After the bugs are fixed by the developer it comes to testing for testing the bug and after testing the bug the results are recorded in the trailing history section of the MR.

**51. At which stage in the development process should QA get involved? Should they be involved at the start of the project once a requirements document has been rendered? Should they only be aware of the details of the project when the coding is completed? Should QA be the facilitators of processes throughout the development process?**

Right from the beginning. In fact, QA should have a hand in the requirements phase. Testing will be based on requirements so it would make sense to have QA members present. This is, again in my opinion, doubly so if you are talking about automated testing.

Ideally, in my little world, I like to be involved because I also want to provide some reality checks to the requirements. For example, if something is required but it would be a bear to implement in automation (and automation is desired) I like to make that known. If it will cause a significant amount of performance testing that there is no time or dedicated resources for, I like to make that known. In the world of browsers, if a change will require vast amounts of cross-browser testing and resources are short, I want to make that known.

You ask if QA should be "facilitators of processes throughout the development process" and I would say "Yes" or, at the very least, they should have a dual hand in it with product/project managers. This puts QA in the role of not just product improvement but process improvement as well which, in the end, helps testability and productivity.

Also there's an issue with getting the development team used to QA being around. If you're there from the start I think its much easier to influence the development process. Rather than appearing on the scene once the project has been under way for a while and trying to incorporate your QA needs into the development team's already established procedures.

I completely agree with both replies to your message so far. QA should either be involved from the very start of the project OR at least cc'd on every email or memo regarding the project. Whether they are regarding meetings related to the project or the business manager on the project is sneaking some new requirements to the developer. QA MUST ALWAYS be in the loop!