* **What is RDBMS?**
* RDBMS stands for Relational Database Management System. RDBMS is the basis for SQL, and for all modern database systems like MS SQL Server, IBM DB2, Oracle, MySQL, and Microsoft Access.
* A Relational database management system (RDBMS) is a database management system (DBMS) that is based on the relational model as introduced by E. F. Codd.
* Most of today's databases are relational:
  + database contains 1 or more tables
  + table contains 1 or more records
  + record contains 1 or more fields
  + fields contain the data
* **What is SQL?**
* SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in relational database.
* SQL is the standard language for Relation Database System. All relational database management systems like MySQL, MS Access, Oracle, Sybase, Informix, postgres and SQL Server use SQL as standard database language.
* SQL is a language of database, it includes database creation, deletion, fetching rows and modifying rows etc.
* SQL is an ANSI (American National Standards Institute) standard but there are many different versions of the SQL language.
* SQL is the standard programming language of relational DBs
* SQL is a standard computer language for accessing and manipulating databases.
* SQL is a great example of a declarative programming language
* **Write SQL commands**
* DDL – Data Definition Language
* DML – Data Manipulation Language
* DCL – Data Control Language
* DQL – Data Query Language
* **What is join?**
* A join in SQL combines columns from one or more tables into a new table. The operation corresponds to a join operation in relational algebra.
* Informally, a join stitches two tables and puts on the same row records with matching fields.
* **Write types of join.**
* INNER JOIN:- returns rows when there is a match in both tables.
* LEFT JOIN:- returns all rows from the left table, even if there are no matches in the right table.
* RIGHT JOIN:- returns all rows from the right table, even if there are no matches in the left table.
* FULL JOIN:- returns rows when there is a match in one of the tables.
* **How many constraint and describe itself?**
* There are mainly 6 constraints;
  + Primary key - unique+not null, one primary key/table
  + Default - Set Default value
  + UNIQUE - Not Duplicate, null
  + Check - Validate the column
  + Not Null - Column can't be null (empty)
  + FOREIGN - refer the primary key of the other table
* **Difference between RDBMS vs DBMS**
* **RDBMS**
* RDBMS stands for Relational Database Management System.
* It stores data in tabular form
* Multiple data elements can be accessed at the same time
* Stored data is related to each other
* Normalization is not present
* Supports distributed database
* It deals with large amount of data
* More security measures provided
* **DBMS**
* DBMS stands for Database Management System.
* It stores data as a file
* Data elements need to access individually
* No relationship between data
* Normalization is present
* Does not support distributed database
* It deals with small amount of data
* Security is less
* **What is API testing?**
* Application Programming Interface (API) is a software interface that allows two applications to interact with each other without any user intervention
* It is a computing interface which enables communication and data exchange between two separate software systems.
* The purpose of API Testing is to check the functionality, reliability, performance and security of the programming interfaces.
* **Types of API testing.**
* There are mainly 3 types of API Testing
* **Open APIs:** These types of APIs are publicly available to use like OAuth API from Google. It has also not given any restriction to use them. So, they are also known as Public APIs.
* **Partner APIs:** Specific rights or licenses to access this type of API because they are not available to the public.
* **Internal APIs**: Internal or private. These APIs are developed by companies to use in their internal systems. It helps you to enhance the productivity of your teams.
* **What is Responsive Testing?**
* A responsive web design involves creating a flexible web page that is accessible from any device, starting from a mobile phone to a tablet.
* Furthermore, a responsive web design improves users’ browsing experience.
* Considering this from a quality assurance perspective, a responsive web design requires thorough evaluation using a variety of devices before it is ready to go live.
* Software testers may find it challenging to perform responsive design testing as a variety of factors are to be looked into during the testing phase.
* Some points to be understand for Responsive Testing.
  + The challenges involved in testing a responsive website
  + How website testing differs from a mobile device to a computer
  + Rules and guidelines to be followed during responsive design testing and
  + Lastly, various tools available to perform responsive testing
* **Which types of tools are available for Responsive Testing?**
* Tools available for responsive testing are as follows;
  + LT Browser
  + Lembda Testing
  + Google Resizer
  + I am responsive
  + Pixel tuner
* **What is the full form of .ipa, .apk?**
* ipa - International Phonetic Alphabet
* apk – Android Packet Kit
* **How to create step to open the developer option mode ON?**
* Go to “Settings”
* Go to “About Phone”
* Tap on “Build number” seven times
* Now you will see a message “you are now a developer”
* Go back and find “developer options”
* Now toggle the switch on
* **Which components have you used in Load Runner?**
* Load runner components are
  + Load generator
  + Virtual user generator (VuGen)
  + Controller
  + Analyzer
* **How can you set the number of Vusers in Load Runner?**
* We can set the number of Vusers in the controller section while creating our scenarios.
* Many other advanced options like ramp-up, ramp-down of Vusers are also available in the controller section.
* **What is Correlation?**
* Correlation is the capturing of dynamic values passed from the server to the client and back.
* The dynamic values may vary based on each user activity or for other users.
* **What is the process for developing a Vuser Script?**
* A Vuser script can be created in four steps
  + Step 1 - Record the Vuser script
  + Step 2 – Playback and improve the recorded Vuser script
  + Step 3 – Define and test the different run-time parameters
  + Step 4 – Use the script in a loadrunner scenario
* **How Load Runner interacts with the application?**
* Loadrunner simulates user activity by generating messages between application components or by simulating interactions with the user interface such as key presses or mouse movements.
* The messages and interactions to be generated are stored in scripts.
* **How many Vusers are required for load testing?**
* The number of Vusers required is determined by several factors including the system Under Test (SUT), Hardware settings, Network configurations, Memory, Operating System (OS) and Performance Test Objective.
* **What is the relationship between Response Time and throughput?**
* The response time for an average transaction tends to decrease as overall throughput increased.
* However, the response time can be decreased for a specific query, at the expense of overall throughput by allocating a disproportionate amount of resources to that query.
* **What is the difference between hits/second and requests/second?**
* Hits per second is the number of calls (hits) to the webserver per second and request per second is the number of request made to the webserver per second.
* **What is Automation Testing?**
* Test automation is the use of software to control the execution of tests, the comparison of actual outcomes to predicted outcomes, the setting up of test preconditions, and other test control and test reporting functions.
* Test automation is a process of writing a computer program to do testing that would otherwise need to be done manually.
* **Which are the browsers supported by selenium IDE?**
* Only Firefox is supported by Selenium IDE.
* **What are the advantages of Selenium?**
* Very easy to use and install.
* No programming experience is required, through knowledge of HTML and DOM are needed.
* Can export tests to formats usable in Selenium RC and WebDriver.
* Has built-in help and test results reporting module.
* Provides support for extensions.
* **Why testers should opt for Selenium and not QTP?**
* Open source, free to use, and free of charge.
* Highly extensible
* Can run test across different browsers
* Support various operating systems
* Support mobile devices
* Can execute tests while the browser is minimized to be visible on the desktop
* Can execute tests in parallel