1. **Which components have you used in Load Runner?**

The key components of LoadRunner are:

**Load Generator** :- generates the load against the application by following scripts

**VuGen -**  (Virtual User Generator) for generating and editing scripts

**Controller**  - controls, launches and sequences instances of Load Generator - specifying which script to use, for how long etc. During runs the Controller receives real-time monitoring data and displays status.

**Agent process -**  manages connection between Controller and Load Generator instances.

**Analysis** - assembles logs from various load generators and formats reports for visualization of run result data and monitoring data.

**2)How can you set the number of Vusers in Load Runner?**

You can set the number of Vusers in the controller section while creating your scenarios. Many other advanced options like ramp-up, ramp-down of Vusers are also available in the Controller section.

**3)What is Correlation?**

Correlation is used to obtain data which is unique for each run of your test script (ex: session ids). While recording, these dynamic values are hard-coded in your script causing the script to fail during playback. Correlation is a technique where dynamic values are not hard-coded in your script but are extracted at run-time to avoid failure.

**4)What is the process for developing a Vuser Script?**

There are 5 steps for developing a vuser script.

1-recording the vuser script .

2-edit the vuser script.

3-runtime setting .

4-run the vuser script in stand-alone mode.

5-incorporate the vuser script into a LoadRunner scenario.

**5)How Load Runner interacts with the application?**

Protocol is used in Load Runner to interact with the application.

**6)How many VUsers are required for load testing?**

Create a scenario by defining Vuser groups to which are assigned a quantity of individual Vusers, Vuser scripts, and load generators to run the scripts. All Vusers in a group can be assigned to run the same script on the same load generator machine. Different scripts and load generators can be assigned to the various Vusers in a group.

For example, if you run a load test with 10,000 virtual users, each making a request every 20 seconds (3 requests per minute), then you're making 30,000 requests per minute, which equals 500 requests per second.

**7)What is the relationship between Response Time and Throughput?**

The Throughput shows the amount of data in bytes that the Vusers received from the server in a second. When It is compared with transaction response time, throughput and response time get decreased.

The peak throughput and highest response time would occur approximately at the same time.

**8)What is the difference between hits/second and requests/second?**

Hits per second means the number of hits the server receives in one second from the vuser.

Request per second is the number of request the vuser will request from the server.

**11)What is Automation Testing?**

Testing technique that uses automation testing tools to

control the environment set-up, test execution and results reporting. It is performed by a computer and is used inside the testing teams

**12) Which Are The Browsers Supported By Selenium Ide?**

Selenium IDE has add-ons for Firefox and Chrome browsers. Selenium IDE comes with a rich set of commands that are powered by Selenese and it allows you to record and test different interactions of a web application with the browser.

**13) What are the benefits of Automation Testing?**

1)70% faster than the manual testing

2)Wider test coverage of application features

3)Reliable in results

4)Ensure Consistency

5)Saves Time and Cost

6)Improves accuracy

7)Human Intervention is not required while execution

8)Increases Efficiency

9)Better speed in executing tests

10)Re-usable test scripts

11)Test Frequently and thoroughly

12)More cycle of execution can be achieved through automation

13)Early time to market

**14) What are the advantages of Selenium?**

1)Very easy to use and install.

2)No programming experience is required, through knowledge of HTML and DOM are needed

3)Can export tests to formats usable in Selenium RC and WebDriver

4)Has built-in help and test results reporting module.

5)Provides support for extensions**.**

**15) Why testers should opt for Selenium and not QTP?**

Selenium is an open source whereas QTP is a commercial tool  
  
Selenium is used specially for testing web based applications while QTP can be used for testing client server application also  
  
Selenium supports Firefox, IE, Opera, Safari  on operating systems like Windows, Mac, Linux etc. however QTP is limited to Internet Explorer on Windows.  
  
Selenium supports many programming languages like Ruby, Perl, Python whereas QTP supports only VB script