Module 5

1. Which components have you used in Load Runner?

- Load generator: It is used to generate the load against the application by running the script.
- VuGen: It is used for generating and editing scripts.
- Controller: It is used to control, launch and sequence the instance of a load generator.
- Agent Process: It is used to manage the connection between the controller and load generator instances.
- Analysis: It assembles the logs from different load generators and formats the reports for visualization of results and monitoring data.

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

We 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. 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 four steps for developing a vuser script.
    - Record the Vuser Script.
    - Playback / Enhance the recorded vuser script.
    - Define the various run-time settings & check
    - Incorporate the script in 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?

The number of VUsers required depends on your system under test, network configurations, hardware settings, memory, operating system, software applications objective of a performance test. There can not be any generic value for Vuser.

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 mean 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.

9. What is Automation Testing?

- Automation Testing is a software testing technique that performs using special automated testing software tools to execute a test case suite. On the contrary, Manual Testing is performed by a human sitting in front of a computer carefully executing the test steps.
- The automation testing software can also enter test data into the System Under Test, compare expected and actual results and generate detailed test reports. Software Test Automation demands considerable investments of money and resources.
- Using a test automation tool, it's possible to record this test suite and re-play it as required. Once the test suite is automated, no human intervention is required. This improved ROI of Test Automation.
- The goal of Automation is to reduce the number of test cases to be run manually and not to eliminate Manual Testing altogether.

10. Which Are The Browsers Supported By Selenium Ide?

- Firefox Browser
- Chrome Browser

11. What are the benefits of Automation Testing?

- 70% faster than the manual testing
- Wider test coverage of application features
- Reliable in results

- Ensure Consistency
- Saves Time and Cost
- Improves accuracy
- Human Intervention is not required while execution
- Increases Efficiency
- Better speed in executing tests
- Re-usable test scripts
- Test Frequently and thoroughly
- More cycle of execution can be achieved through automation
- Early time to market

12. What are the advantages of Selenium?

- Language and Framework Support
- Open Source Availability
- Multi-Browser Support
- Support Across Various Operating Systems
- Ease Of Implementation
- Reusability and Integrations
- Flexibility
- Parallel Test Execution and Faster Go-to-Market
- Easy to learn and use
- Less hardware usage
- Constant updates

13. Why testers should opt for Selenium and not QTP?

Selenium is more popular than QTP as
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