**Module 4 :- Automation and Selenium**

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

Ans.:- 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.

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

Ans.:- How can you set the number of Vusers in LoadRunner? 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.

1. **What is Correlation?**

Ans.:- Correlation is a statistical measure that indicates the extent to which two or more variables fluctuate in relation to each other.

1. **What is the process for developing a Vuser Script?**

Ans.:-

* 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.

1. **How Load Runner interacts with the application?**

Ans.:- 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.

1. **How many VUsers are required for load testing?**

Ans.:- 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

1. **What is the relationship between Response Time and Throughput?**

Ans.:- Response time and throughput are related. The response time for an average transaction tends to decrease as you increase overall throughput.

1. **What is the difference between hits/second and requests/second?**

Ans.:- 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.

1. **What is Automation Testing?**

Ans.:- Automated testing is a process that validates if software is functioning appropriately and meeting requirements before it is released into production.

1. **Which Are The Browsers Supported By Selenium Ide?**

Ans.:- Selenium IDE has add-ons for Firefox and Chrome browsers.

1. **What are the benefits of Automation Testing?**

Ans.:-

* Faster Feedback Cycle. ...
* Testing on Multiple Platforms in Parallel. ...
* Reusability of Test Scripts. ...
* Easy Data-driven Testing. ...
* Test Insights. ...
* Maximum Test Coverage. ...
* 24X7 Test Execution. ...
* Scalability.

1. **What are the advantages of Selenium?**

Ans.:- Selenium is an open-source automation testing tool and it is free of cost to use. Selenium provides high tester flexibility to write advanced and complex test cases. Supports test case execution on multiple operating systems such as Windows, Linux, Android, Mac, and iOS.

1. **Why testers should opt for Selenium and not QTP?**

Ans.:- Selenium, however, supports a wide range of programming languages. QTP/UFT test scripts run only on the Windows environment. They cannot be run across all browsers. On the other hand, Selenium is OS independent and allows test scripts to run across all browsers.