**Module 4 (Automation Core Testing (Load Runner Up and Selenium IDE)**

**Q-1 Which components have you used in Load Runner?**

* 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.

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

To gradually run the Vusers, select the number of Vusers

To begin running concurrently and the Amount of time

LoadRunner has to wait Between Vuser ramp ups.

**Q-3 What is Correlation?**

* In applications output of the previous transaction is used as an input for the next transaction.
* For example:

1. System generated session ids
2. URLs that change each time you access the Web page
3. Fields (sometimes hidden) recorded during a form submissipag

* The data is only good for the current session

Correlate submissipa

1. Capture output value from one step
2. Use captured value as input to another step

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

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.

**Q-5 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.

**Q-6 How many VUsers are required for load testing?**

Concurrent virtual user calculation

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.

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

Response time and throughput are related. The response time for an average transaction tends to decrease as you increase overall throughput. However, you can decrease the response time for a specific query, at the expense of overall throughput, by allocating a disproportionate amount of resources to that query.

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

Hits per sec is the number of calls to the Webserver per second. And Request per sec is the number of request made to the webserver per second.

**Q-9 What is Automation Testing?**

Automated testing is the application of software tools to automate a human-driven manual process of reviewing and validating a software product. Most modern agile and DevOps software projects now include automated testing from inception.

**Q-10 Which Are The Browsers Supported By Selenium Ide?**

The supported browsers include Mozilla Firefox, Google Chrome, Microsoft Edge, Safari, and Opera, among others.

**Q-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

**Q-12 What are the advantages of Selenium?**

1. Open source, free to use, and free of Charge.
2. Highly extensible
3. Can run tests across different browsers
4. Supports various operating systems
5. Supports mobile devices
6. Can execute tests while the browser is Minimized to be visible on the desktop
7. Can execute tests in parallel.

**Q-13 Why testers should opt for Selenium and not QTP?**

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.