Software Testing Assignment

Module-5

- 1. Which components have you used in Load Runner?
- Load Runner used 5 components: -
 - Virtual User Generator
 - Controller
 - Load Generator
 - Agent Process
 - Analysis
- 2. How can you set the number of Vusers in Load Runner?
- To set the number of virtual users (Vusers) in LoadRunner, follow these steps: -
 - Open your LoadRunner script: Navigate to the script you want to edit.
 - Access the Controller: Click on the "Controller" tab within LoadRunner to access the Controller interface.
 - Create a scenario: If you haven't already, create a new scenario by clicking on the "New Scenario" button.
 - Add scripts to the scenario: Drag and drop your script(s) into the scenario window.
 - Configure Vuser groups: Right-click on a script in the scenario and select "Create Vuser Group." This will create a new group for that script.
 - Set Vuser count: Right-click on the Vuser group and select "Properties." In the "General" tab, you'll find the "Initial Vusers" field. Enter the desired number of Vusers for that group.

- Configure other Vuser settings: You can also adjust other Vuser settings in the "General" tab, such as "Think Time" and "Ramp-Up Time."
- Run the scenario: Once you've configured the Vuser count and other settings, click on the "Run" button to start the load test.

3. What is Correlation?

- Correlation is data which is sent to the client from the server, and later sent back to the server by the client.
- 4. What is the process for developing a Vuser Script?
- There are four steps for developing a vuser script: -
 - Record the Vuser Script.
 - Playback and improve the recorded vuser script.
 - Define and test the different run-time parameters.
 - Use 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.

Selenium IDE

- 1. What is Automation Testing?
- Automation Testing is a 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.
- 2. Which are the Browsers Supported By Selenium IDE?
- Selenium IDE supports the following browsers: -
 - Chrome
 - Firefox
 - Edge
 - Internet Explorer
 - Safari

- 3. What are the benefits of Automation Testing?
- Benefits of Automation Testing is: -
 - 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
- 4. What are the advantages of Selenium?
- Advantages of Selenium is: -
 - Open source, free to use, and free of charge
 - Highly extensible
 - Can run tests across different browsers
 - Supports various operating systems
 - Supports mobile devices
 - Can execute tests while the browser is minimized to be visible on the desktop
 - Can execute tests in parallel

- 5. Why testers should opt for Selenium and not QTP?
- Testers should opt for Selenium because Selenium is more advantageous than QTP in terms of costs and flexibility. It also allows you to run tests in parallel, unlike in QTP where you are only allowed to run tests sequentially.