TOPS TECHNOLOGIES

**Software testing assignment**

**Module-5(Automation and Selenium)**

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

= The key components of LoadRunner are:

1. Load Generator

2. Virtual User Generator

3. Controller

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

= In the Vusers dialog box, click the Add Vuser(s)button. The Add Vusers dialog box opens. From the Quantity to add box, select the number of Vusers that you want to add to the group.

**3 What is Correlation?**

= LoadRunner Scripting 'Correlation' term refers to the handling of dynamic values coming from the server. These dynamic values are the unique values which are generated by the server for security purpose like the session ID, authorization token etc.

**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 load runner scenario.

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

= LoadRunner works on the concept of recording and replaying the user activities and generating the desired load on the server. It simply simulates the real world user's actions and helps to identify the performance of the software application or system by generating virtual load.

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

= If you know the peak hourly visit rate (the number of unique visitors to the website in its busiest hour) and the average visit length (the amount of time, on average, each use spends on the website), enter them below for an estimate of the required Virtual User count.

**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.

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

= Hits/second are the number of HTTP requests made by VUsers to the Web Server in a scenario or session step run on a per second basis. Requests/second are the number of requests completed during each second of scenario run.

**9 What is Automation Testing?**

= Automated testing is a process that validates if software is functioning appropriately and meeting requirements before it is released into production. This software testing method uses scripted sequences that are executed by testing tools.

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

= Latest version of Selenium IDE supports the following two browsers:

1. Firefox Browser

2. Chrome Browser

**11 What are the benefits of Automation Testing?**

= Automation testing is reliable. It is reliable because it tests the application with the help of tools and test scripts. With automation testing, test engineers are free to focus on other work. It improves the testing coverage as the automatic execution of test cases is faster than manual execution. Automation testing allows the execution of test cases in a 24x7 environment.

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

= Selenium has certain unique beneﬁts that give it a competitive edge over others. Open Source: One of the most important beneﬁts of Selenium is its Open Source Accessibility. As it is an open-source tool, anyone can download the source code and use it

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

= Testers should opt for Selenium and not QTP because

● 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