### Q1. What is Automation Testing?

A1. Test automation is a process of writing a computer program to do testing that would otherwise need to be done manually. It is the use of 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. Commonly, test automation involves automating a manual process already in place that uses a formalized testing process. Although manual tests may find many defects in a software application, it is a laborious and time-consuming process.

# Q2. Which Are the Browsers Supported by Selenium Ide?

A2. Selenium is widely supported by popular web browsers, including Google Chrome, Mozilla Firefox, Safari, Microsoft Edge, and Opera. It provides compatibility with different browser versions, allowing testers to automate web applications across multiple browsers. Selenium's cross-browser support enables comprehensive testing and ensures consistent behavior across different browser environments.

#### Q3. What are the benefits of Automation Testing?

A3. Following 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

## Q4. What are the advantages of Selenium?

A4. Following are the advantages of Selenium:

- Very easy to use and install.
- No programming experience is required, through knowledge of HTML and DOM are needed.
- Can export tests to formats usable in Selenium RC and WebDriver
- Has built-in help and test results reporting module.
- Provides support for extensions.

# **Software Testing Assignment - Module 5**

# Q5. Why testers should opt for Selenium and not QTP?

A5. Testers opt for Selenium and not QTP for the following reasons:

- Selenium is Open source, free to use, and free of charge while QTP is commercial.
- Selenium is highly-extensible while QTP has limited add-ons.
- Selenium can run tests across different browsers while QTP is limited to few specific browsers.
- Selenium can run on various OS while QTP runs only on Windows
- Selenium supports mobile devices while QTP also supports but using 3<sup>rd</sup> party software.
- Selenium can execute tests in parallel while QTP Can only execute in parallel but using Quality Centre which is again a paid product.