1) What is Selenium? What are the different Selenium components? Explain about Selenium Webdriver?

Selenium is an automation tool and it can automate only web based application.IDE,webdriver,grid is the components of selenium. Selenium WebDriver is a web framework that permits you to execute cross-browser tests.

2) How does Selenium communicate with the Web browsers?

Selenium Script creates an HTTP Request for each selenium command and sends it to the browser driver. An HTTP request is then sent to the server using Browser Driver.

3. What are the locators available to find an element using Selenium?

Id,name,classname,link text,partial linktext,tagname,CSS selector,xpath.

4. Why ID is preferable than X-Path?

IDs are unique for each element on the page, it is considered the fastest and safest method to locate elements.so it is Preferable than xpath.

5. How to select value in dropdown?

WebElementdd1=driver.findElement(By.attribute("attributevalue");

Select v1=new Select(dd1);

V1.selectbyvalue("2");

6) What is the difference between Absolute Path and Relative Path?

Absolute path is starts from root node and it is complex to use.

Relative path is starts from current node and it is used to better than absolute.

7) How to verify if the given check box is checked or not (it is not taught but you can explore) Try here: http://leafground.com/pages/checkbox.html

```
If(isSelected==true)
{
  Statement 1;
}
else{
  Statement 2;
}
```

8)Difference between System.setProperty and WebDriverManager

System.set property - It is done by manual to download the .exe file depend on the webdriver version. We can do it for each and every time to set the path.

WebDriverManger- It is automatically check the web driver version and download the .exe file to set the path.

9) Write the syntax for preceding and following x-paths.

```
//tagname[@attribute = 'attributevalue']//preceding::input
//tagname[@attribute='attribute value']//following::input
```

10) How to get an attribute value using Selenium WebDriver?

getAttribute()