

# PYTHON – SELENIUM SYLLABUS

---

1. Introduction
  - a. History
  - b. Features
  - c. Setting up path
  - d. Working with Python
  - e. Basic Syntax
  - f. Variable and Data Types
  - g. Operator
2. Conditional Statements
  - a. If
  - b. If- else
  - c. Nested if-else
3. Looping
  - a. For
  - b. While
  - c. Nested loops
4. Control Statements
  - a. Break
  - b. Continue
  - c. Pass
5. String Manipulation (Key for Interview)
  - a. Accessing Strings
  - b. Basic Operations
  - c. String slices
  - d. Function and Methods
6. Lists and Sets
  - a. Introduction
  - b. Accessing list and sets
  - c. Operations
  - d. Working with lists and sets
  - e. Function and Methods

## 7. Tuple

- a. Introduction
- b. Accessing Tuples
- c. Operations
- d. Working
- e. Functions and Methods

## 8. Dictionaries

- a. Introduction Accessing values in dictionaries
- b. Working with dictionaries
- c. Properties
- d. Functions

## 9. Functions

- a. Defining a function
- b. Calling a function
- c. Types of functions
- d. Function Arguments
- e. Anonymous functions
- f. **Global and local variables**

## 10. Modules

- a. Importing module
- b. Math module
- c. Random module
- d. Packages
- e. Composition

## 11. Input-Output

- a. Printing on screen
- b. Reading data from keyboard
- c. Opening and closing file
- d. Reading and writing files
- e. Functions

## 12. OOPs concept

- a. Class and object
- b. Attributes
- c. Inheritance
- d. Overloading
- e. Overriding
- f. Data hiding

### 13. Exception Handling

- a. Exception
- b. Exception Handling
- c. Except clause
- d. Try ? finally clause
- e. User Defined Exceptions

### 14. Install – Pycharm / pydev

- a. Install python
- b. Install selenium bindings
- c. Install pydev with eclipse
- d. Console on pydev
- e. Install python
- f. Install selenium bindings
- g. Install pydev with eclipse
- h. Console on pydev

### 15. Browser commands

- a. Open browser in selenium python
- b. Close and quit browsers
- c. Open webpage in selenium python
- d. Browser size in selenium python
- e. Webpage properties
- f. Navigation commands in selenium python

### 16. Developer tools in firefox and chrome | selenium

- a. Developer tool in chrome
- b. Developer tool in firefox

### 17. Elements

- a. Web element in python
- b. The priority of locators in selenium
- c. Find element by id
- d. Find element by name.
- e. Find element by tag name
- f. Find element by linked Text/Partial Linked text.
- g. Find element by classname.
- h. Find element by **xpath**.
- i. Find element by css selector.
- j. Find elements

- k. Find element and find elements.
- l. Excellent & reliable selenium python locator

#### 18. Waits

- a. Implicit wait
- b. Explicit wait

#### 19. WebElement commands

- a. Web element operations in selenium python
- b. TextBox
- c. ListBox
- d. Links
- e. Check Box
- f. Radio Button
- g. HTML Tables
- h. Calendars

#### 20. Dropdowns

- a. Dropdowns in python selenium | select
- b. Dropdowns in python selenium | list

#### 21. Popups and Alerts

#### 22. Iframes

#### 23. Handling multiple windows

#### 24. Handling webtables

#### 25. Screenshot

#### 26. Mouse and keyboard Actions

#### 27. Exceptions

#### 28. Handling Files

#### 29. Java Script Executor

#### 30. Logging

- a. Logging with python selenium
- b. Logging in python
- c. Configuring logging
- d. Logging with selenium python
- e. Logging to console with python
- f. Print vs. Logging

#### 31. Excel

- a. Excel spread sheets with python
- b. Openpyxl module with python selenium
- c. Read excel using openpyxl with python selenium
- d. Get all values of a specific column
- e. Write excel file using openpyxl in python selenium

#### 32. Read & write csv file

- a. Csv files in python
- b. Csv with python selenium
- c. Reading a csv file with header
- d. Read the urls from the csv file
- e. Writing a csv file in python selenium
- f. Writing to a file with dictwriter in python selenium
- g. Read & write csv files with custom delimiter.

### 33. Unittest

- a. What is python unittest framework
- b. Things to remember while writing unit tests
- c. Tests in unittest python
- d. Setup, Teardown
- e. Setupclass, Teardownclass
- f. Setupmodule & teardownmodule
- g. Skipping tests and expected failures

### 34. Assertions

- a. Assertions in unittest python with selenium

### 35. Load tests and suites

- a. Loading tests to suite and running tests in python selenium
- b. Create test suite

### 36. PyTest -TDD

- a. What is python Pytest framework
- b. Tests in Pytest python
- c. Setup
- d. Teardown
- e. Skipping tests and expected failures

### 37. Designing framework with Page Object Model

### 38. PyBehave (Similar to Cucumber) –

- a. What is PyBehave framework
- b. Tests in Behave python
- c. What is Feature
- d. What is Step definition
- e. How to setup runner class

### 39. Allure Reporting

- a. Configuring Allure Report

### 40. Interview Questions

### **Bonus Package**

### 41. GitHub/BitBucket

### 42. Jenkins