## Module - 3

- 1. Write a Python Program to find an American phone number (example: 415-555-4242) in a given string using Regular Expressions.
- 2. Describe the difference between Python os and os.path modules. Also, discuss the following methods of os module
  - a) chdir() b) rmdir() c) walk() d) listdir() e) getcwd()
- 3. Demonstrate the copy, move, rename and delete functions of shutil module with Python code snippet.
- 4. Describe the following with suitable Python code snippet.
  - (i) Greedy and Non Greedy Pattern Matching
  - (ii) findall() method of Regex object.
  - (iii) charcter class
- 5. Explain the file Reading/Writing process with suitable Python Program.
- 6. Define assertions. What does an assert statement in python consists of? Explain how assertions can be used in traffic light simulation with Python code snippet.
- 7. Demonstarte project Phone Number and Email Address Extractor.
- 8. Explain Absolute and Relative Paths with example.
- 9. Explain project Generating Random Quiz Files with all steps.
- 10. Demonstrate Assertion , Write a python program using an Assertion in a Traffic Light Simulation.
- 11. Write a python program Backing Up a folder into a Zip File , Explain steps involved in the above project.
- 12. List and explain Shorthand code for common character classes .Illustrate how do you define your own character class?
- 13. Explain the usage of Caret and dollar sign characters in regular expression.
- 14. Write a python program to extract phone numbers and email addresses using regex
- 15. Explain saving of variables using shelve module.
- 16. With code snippet, explain reading, extracting and creating ZIP files
- 17. How do we specify and handle absolute ,relative paths?