## MCA Theory Assignment-I

## **Introduction to Python Programming**

Date: 13/10/2022

- (1) What are the key features of Python?
- (2) What is PVM? How PVM works? Explain with diagram.
- (3) Explain datatypes in Python.
- (4) What is operator? Explain operator in detail.
- (5) Explain conditional statement in python using appropriate example.
- (6) Explain loop in detail with example.(All loops)
- (7) Explain following functions:
  - a. Id()
  - b. Range()
  - c. Map()
- (8) What is function? How you can define function in python and call that function.
- (9) How you can return values from a function in python.
- (10) Explain arbitrary keyword function in python.
- (11) What is the meaning of Default Parameter Value in function?
- (12) What is recursion? Explain with an example?
- (13) Explain array using array module?
- (14) Explain array using numpy Module?
- (15) Explain following Datatypes in Python with its methods:
  - a. List
  - b. Tuple
  - c. Set
  - d. Dictionary
- (16) What is Lambda expression? Explain it with an example.
- (17) Explain Indexing and Slicing of string.
- (18) What is the difference between list and tuple?
- (19) What is Command-line Arguments? How we can pass command line arguments in python?
- (20) What are the different mathematical functions available in python? Explain in detail.