

**PYTHON PROGRAMMING**  
(Computer Science & Engineering)

Time: 3 hours

Max. Marks: 70

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Write steps to run a python script.
  - (b) Give an example for shared references.
  - (c) What is the use of membership operators?
  - (d) What will be the output of `>>>m = [[x, x+1, x+2] for x in range (0, 3)]`?
  - (e) Give examples for any two usage of dictionaries data structure.
  - (f) What are the uses of comprehensions in python?
  - (g) How to pass arguments to a function in python?
  - (h) Give an example for local and global scope of the variables in a function.
  - (i) What is the need of testing?
  - (j) What is meant by override a method?

**PART – B**  
(Answer all five units, 5 X 10 = 50 Marks)**UNIT – I**

- 2 Describe in detail about technical strengths of python.

**OR**

- 3 Describe about available I/O facilities in python.

**UNIT – II**

- 4 List out various string manipulation process that can be done in python with example code segment.

**OR**

- 5 Describe about control flow statements in python with an example.

**UNIT – III**

- 6 What are the features of tuple data structure? Explain these features with example code in python.

**OR**

- 7 Explain all built-in methods for list data structure in python.

**UNIT – IV**

- 8 Write a python program to define a function to sort a give array, passing as an argument. Also write main function to use the defined function.

**OR**

- 9 Describe about default arguments and variable length arguments with suitable programs.

**UNIT – V**

- 10 Explain how to implement inheritance in python with example.

**OR**

- 11 Explain about the available operating system interface through standard library.

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