

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

MCA I Year II Semester Regular & Supplementary Examinations June/July-2025
PYTHON

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units $5 \times 12 = 60$ Marks)

UNIT-1

1. Compare and explain the following operators with an example
i) Assignment ii) Membership iii) Identify [12 Marks]

OR

2. a) Describe the need of python.
b) List out various applications of python. [12 Marks]

UNIT-2

3. Differentiate and explain local and global variable with an example python program. [12 Marks]

OR

4. Classify various slicing operations on a data structure [12 Marks]

UNIT-3

5. a) Explain encapsulation in python with an example.
b) What is init method in python? Explain with example. [12 Marks]

OR

6. Discuss object oriented programming in python with creation of class and object. [12 Marks]

UNIT-4

7. Illustrate various Mathematical Operations available in R Language. With example. [12 Marks]

OR

8. a) Differentiate between Vector, List, Matrix, and Data frame.

b) What is a vector in R? Explain different ways to create a vector. [12 Marks]

UNIT-5

9. Choose the following data2

> data2 [12 Marks]

OR

10. a) Why we use Wilcoxon U -Test? Identify the commands in it.

b) Discuss Two -Sample and One -Sample in U -Test. [12 Marks]