

**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. a) Choose various operators of Arithmetic and Comparison.
- b) Design a python program to demonstrate logical operator. [12 Marks]

**OR**

2. a) Demonstrate for and while statements in python with example.
- b) Build a python program to check given number is positive or negative or zero. [12 Marks]

**UNIT-2**

3. a) What is a function? Explain how we can create a function.
- b) Explain different ways to pass arguments in a function. With example [12 Marks]

**OR**

4. Distinguish various types of arguments with example program in python . [12 Marks]

**UNIT-3**

5. a) What is an Error? Explain types of errors.
- b) Compare and explain various built -in exception in python. [12 Marks]

**OR**

6. a) Illustrate class inheritance in Python with an example
- b) Write a python program to find the area of a cone and circle using inheritance. [12 Marks]

**UNIT-4**

7. a) List the functions for reading data into R.  
b) List the functions for writing data to files in R. [12 Marks]

**OR**

8. a) Identify different ways to select and display parts of a Vector Object.  
b) How can we rearrange the items in a vector? [12 Marks]

**UNIT-5**

9. Explain different ways to copy graphics to other applications. [12 Marks]

**OR**

10. a) Identify and explain various t -test commands in r.  
b) Discuss Two -Sample t -Test with Unequal and Equal Variance. [12 Marks]