O.P.Code: 24mca109	Regulation 2021	H.T.No.										

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 x 12 = 60 Marks)

UNIT-1

1 a	a) Describe various features of a python.	CO1	L1	6M
	b) Explain in brief about the application of python.	CO1	L2	6M
	OR			
2 a	a) Describe the need of python.	CO1	L2	4M
	b) List out various applications of python. 3 List and explain various data types in python. With example. 4 Compare and explain the following operators with an example i) Assignment ii) Membership iii) Identify	CO1	L1	8M

UNIT-2

3 a) Illustrate the fruitful functions in python with example. [L3][CO2] [6M]

b) Discuss about Anonymous functions in python with an example. [L2][CO2] [6M] 9 Differentiate and explain local and global variable with an example python program. [L4][CO2] [12M] 10 Illustrate modules in python with an example [L3][CO2] [12M] Course Code: 20MC9125 R20

OR

4 a) How can we create and access the set in python. [L2][CO2] [6M]

b) Identify various methods to perform on set. [L3][CO2] [6M]

UNIT-3

5 a) Discuss how we can raise an exception. [L2][CO3] [6M]

b) Write a simple program which illustrates Handling Exceptions. [L4][CO3] [6M] Course Code: 20MC9125 R20

OR

6 a) Discuss in detail about polymorphism in python. [L2][CO3] [6M]

b) Explain method overriding in python with an example program. [L4][CO3] [6M]

UNIT-4

7 a	a) Differentiate between Vector, List, Matrix, and Data frame.	CO3	L4	4M
	b) What is a vector in R? Explain different ways to create a vector.	CO3	L2	8M
	OR			
8 a	a) List the functions for reading data into R.	CO3	L1	6M
	b) List the functions for writing data to files in R. 5 Illustrate various Mathematical Operations available in R Language. With example.	CO3	L2	6M

UNIT-5

a) Why we use Wilcoxon U -Test? Identify the commands in it. [L4][CO5] [6M]
b) Discuss Two -Sample and One -Sample in U -Test. [L2][CO5] [6M] 4 Choose the following data2 > data2 3 5 7 5 3 2 6 8 5 6 9 4 5 7 3 4 Find the following by using summary statistics commands i) Average of the sample ii) Largest value in the sample iii) Smallest value in the sample iv) How many items are in the sample v) Look at a different data sample [L5][CO5] [12M]

OR

10 a) Describe various commands of Cumulative measures in R . [L2][CO5] [6M]
b) Calculate the cumulative values for the following sample data a <- c(1:9,4,2,4,5:2) [L3][CO5] [6M]