O.P.Code: 20MC9125	R20	H.T.No.									

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

MCA II Year I Semester Regular & Supplementary Examinations January/February-2025

ADVANCED PROGRAMMING (PYTHON & R LANGUAGES)

Time: **3 hours** Max. Marks: **60**

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

1	a	Describe various features of a python.	CO1	L1	4M
	b	Build a python program to check given number is positive, negative or zero.	CO1	L3	4M
		OR			
2	a	Explain various looping statements in python.	CO1	L2	6M
	b	Design a python program to demonstrate Logical operators.	CO1	L6	6M
		UNIT-II			
3	a	What is a Function? Explain how we can create a function.	CO2	L1	6M
	b	Analyze the concept of Anonymous Functions in python.	CO2	L4	6M
		OR			
4	a	Explain different ways to pass arguments in a function with an example.	CO2	L2	6M
	b	Illustrate the fruitful functions in python with example.	CO2	L3	6M
		UNIT-III			
5	a	Discuss in detail about polymorphism in python.	CO3	L2	6M
	b	Explain method overriding in python with an example program.	CO3	L2	6M
		OR			
6	a	Differentiate an Error with an Exception in python. Write an example python program for Exception.	CO3	L4	6M
	b	Illustrate the given below Exceptions. Provide examples for each. i. Built in Exception ii. User Defined Exception.	CO3	L3	6M
		UNIT-IV			
7	a	List the functions for reading data into R.	CO4	L1	6M
	b	List the functions for writing data to files in R.	CO4	L1	6M
		OR			
8	a	How do we convert matrix to data frame in R? Explain with an example.	CO4	L2	6M
	b	How do we convert data frame into a matrix? Explain with an example.	CO4	L2	6M
		UNIT-V			
9	a	Why we use Wilcoxon U- Test. Identify the commands in it.	CO5	L4	6M
	b	Discuss One – Sample and Two – Sample in U – Test.	CO5	L2	6M
		OR			
10	a	Describe various commands of Cumulative measures in R.	CO5	L2	6M
	b	Calculate the Cumulative values for the following sample data. a ← c (1: 9, 4, 2, 4, 5 :2)	CO5	L3	6M

END