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

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
MCA II Year I Semester Supplementary Examinations July-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**	Explain the concept of Variables and Keywords in Python with examples.	**CO1**	**L2**	**6M**
	b	List out the various applications of Python.	**CO1**	**L1**	**6M**
		OR			
2	**a**	Describe Input – Output in python with an example program.	**CO1**	**L4**	**6M**
	b	Design a python program to demonstrate logical operators.	**CO1**	**L6**	**6M**
		UNIT-II			
3	**a**	How can we create and access the tuple in python. Provide an appropriate example.	**CO2**	**L2**	**6M**
	b	Identify various methods performed on tuple in python.	**CO2**	**L3**	**6M**
		OR			
4	**a**	How can we create and access the sets in python. Provide an appropriate example.	**CO2**	**L2**	**6M**
	b	Identify various methods performed on sets in python.	**CO2**	**L3**	**6M**
		UNIT-III			
5	**a**	Explain Encapsulation in python with an example.	**CO3**	**L2**	**6M**
	b	What is Init method in python? Provide an example for Init method.	**CO3**	**L1**	**6M**
		OR			
6	**a**	Discuss the concept of Try, Catch block in Exception with an example program.	**CO3**	**L2**	**6M**
	b	Develop a simple program for Exception Handling in python.	**CO3**	**L6**	**6M**
		UNIT-IV			
7	**a**	What are the various command packages in R?	**CO4**	**L1**	**6M**
	b	How to get extra Packages of R Commands?	**CO4**	**L2**	**6M**
		OR			
8	**a**	What is a vector in R? Explain different ways to create a vector.	**CO4**	**L2**	**6M**
	b	Identify different ways to select and display parts of a vector object.	**CO4**	**L3**	**6M**
		UNIT-V			
9	**a**	List out summary of commands to add names to Rows Columns of Data objects.	**CO5**	**L1**	**6M**
	b	Identify and explain various T – Test commands in R.	**CO5**	**L3**	**6M**
		OR			
10	**a**	Differentiate Plots and Charts in the graphical analysis.	**CO5**	**L4**	**6M**
	b	Draw a pie Chart for the following data.	**CO5**	**L1**	**6M**

Section	I	II	III	IV	V
No. of workers	220	370	190	70	250

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