

Code No: **R20A7204****MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**

(Autonomous Institution – UGC, Govt. of India)

III B.Tech I Semester Supplementary Examinations, June 2025**R Programming**

(B.Tech-AIDS)

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Time: 3 hours**Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing **ONE** Question from each SECTION and each Question carries 14 marks ***

SECTION-I

			BCLL	CO(s)	Marks
1	<i>A</i>	What is R Programming, and what are its main features?	L 1	CO-I	[7M]
	<i>B</i>	Explain the functions str(), summary(), ls(), describe() with examples.	L 2	CO-I	[7M]

OR

2	<i>A</i>	Explain the process of creating and running an R script file?	L 2	CO-I	[7M]
	<i>B</i>	What are lists in R, and how are they different from vectors?	L 1	CO-I	[7M]

SECTION-II

3	<i>A</i>	Explain the various categories of operators in R. (Arithmetic, Relational, Logical, Assignment, and Miscellaneous operators).	L 2	CO-II	[7M]
	<i>B</i>	How does a while loop differ from a for loop? Provide an example.	L 4	CO-II	[7M]

OR

4	<i>A</i>	Explain with an example , how to define and call a custom function in R.	L 2	CO-II	[7M]
	<i>B</i>	How does the switch() statement work to select a code block based on an expression's value?	L 4	CO-II	[7M]

SECTION-III

5	<i>A</i>	Define Merging and accessing list elements.	L 1	CO-III	[7M]
	<i>B</i>	How to create a Matrix? Write a program to add two matrices.	L 3	CO-III	[7M]

OR

6	<i>A</i>	Show how to code R program to create a Data frames which contain details of 5 employees and display the details	L 4	CO-III	[7M]
	<i>B</i>	Write a R program to create a matrix taking a given vector of numbers as input and define the column and row names. Display the matrix.	L 3	CO-III	[7M]

SECTION-IV

7	<i>A</i>	Define Factor.How to create a factor and how to access components of a factor?	L 1	CO-IV	[7M]
	<i>B</i>	How can you use aggregate() to summarize data based on factor levels?	L 3	CO-IV	[7M]

OR

8	<i>A</i>	How does the tapply() function work with factors?	L 3	CO-IV	[7M]
	<i>B</i>	What is a practical use case for split()	L 1	CO-IV	[7M]

SECTION-V

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|-----------|-----------------|---|------------|-------------|-------------|
| 9 | <i>A</i> | What are control statements in R and why are they important? | L 1 | CO-V | [7M] |
| | <i>B</i> | How does R handle operator precedence when combining arithmetic and boolean operations? | L 3 | CO-V | [7M] |
| OR | | | | | |
| 10 | <i>A</i> | Explain arithmetic and boolean operators in R with examples. | L 2 | CO-V | [7M] |
| | <i>B</i> | What are the advantages of explicitly using return() in complex functions? | L 2 | CO-V | [7M] |
