R20 Regulation *Subject code:3P4GC*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech IV Semester Supplementary Examinations, June 2026

R PROGRAMMING

(CSE(AI&ML))

Maximum Marks: 70 Date: 19.06.2026 Duration: 3 hours

Note: **1.This question paper contains two parts A and B.**
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X2M=20 Marks)		Marks	CO	BTL
1	What is assignment operator?	2M	1	L1
2	What is a scalar and write its syntax.	2M	1	L1
3	Define list. write the syntax for finding the length of the list.	2M	2	L1
4	What is cbind() and rbind().	2M	2	L1
5	What is contingency table?	2M	3	L1
6	Write syntax to Extract sub data frame.	2M	3	L1
7	Define data frame.	2M	4	L1
8	Write about order () function.	2M	4	L1
9	Define grep(),regexpr().	2M	5	L1
10	List out any two string manipulation functions.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Write about R data structures and explain with suitable examples.	10M	1	L2
	OR			
12	a) Explain briefly about vector. b) Write syntax and example for Length of a vector.	5M 5M	1	L2
13	a) Explain matrix multiplication and matrix addition with an example. b) Write and explain general list operations.	5M 5M	2	L2
	OR			
14	a) Create a list for student and print the components of a list with the index and name. b) Explain adding and deleting of components from a list.	5M 5M	2	L2
15	Explain the following terms with syntax and examples a) rbind() b)cbind() c)apply().	10M	3	L2

	OR			
16	a) Explain how to merge two data frames with example. b) Explain aggregate () and cut () function.	5M 5M	3	L2
17	a) What is anonymous function and explain replacement function. b) Write a program to print squares of numbers in a given range by using functions.	5M 5M	4	L2
	OR			
18	a) Explain random number generation statistical distribution functions. b) Find the minimum and maximum for 14, 23, 16, 20, 0, -17, and 100.	5M 5M	4	L2
19	List and explain string manipulation functions in R.	10M	5	L2
	OR			
20	a) Explain about text () and locator () functions with examples. b) Explain customizing graphs with an example.	5M 5M	5	L2