R18 Regulation *Subject code:2P6EB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, May 2025

R PROGRAMMING

(CSE)

Maximum Marks: 70 Date: 23.06.2025 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	Define all() and any() functions in R.	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	Define apply functions in matrix.	2M	2	L1
5	Define a data frame with syntax.	2M	3	L1
6	Define Factors and Array.	2M	3	L1
7	Write assignment operators in R.	2M	4	L1
8	List out arithmetic and Boolean operators in R.	2M	4	L1
9	Write syntax for scan () function.	2M	5	L1
10	Write about writing a single line from keyboard.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Explain the following with examples a)Help () b) example () c) rep () d) NA () e) NULL ().	10M	1	L2
	OR			
12	Explain briefly about vector and write syntax and example for Length of a vector.	10M	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	Explain briefly about applying functions to matrix rows and columns.	10M	2	L2
15	Explain lapply(), sapply(), tapply() in data frames.	10M	3	L2
	OR			
16	Write and explain factor and table related functions?	10M	3	L2
17	Explain briefly about functions for Statistical Distributions.	10M	4	L2
	OR			

18	a) Explain writing upstairs in R. and explain super assignment operator. b) Explain random number generation statistical distribution functions.	5M 5M	4	L2
19	List and explain string manipulation functions in R.	10M	5	L2
	OR			
20	a) Explain about creation of a graph and abline with example? b) Differentiate about print () and cat ().	5M 5M	5	L2