



R20 Regulation

Subject code:3P3HB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech III Semester Supplementary Examinations, December 2024

R PROGRAMMING (CSE(DS))

Maximum Marks: 70

Date:11.12.2024

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 which carries 10M.
 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)		CO	Bloom Tx
1	Define all() and any() functions in R.		
2	What is a scalar and write its syntax.	1	L1
3	Define list. write the syntax for finding the length of the list.	1	L1
4	Define apply functions in matrix.	2	L1
5	Define a data frame with syntax.	2	L1
6	Define Factors and Array.	3	L1
7	Write assignment operators in R.	3	L1
8	Define Environment and scope in R.	4	L1
9	Write syntax for scan () function.	4	L1
10	Write about writing a single line from keyboard.	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		CO	Bloom Tx
11	Explain the following with examples Help () b) example () c) rep () d) NA () e) NULL (). [10M]	1	L2
OR			
12	A. Explain briefly about vector. [5M] B. Write syntax and example for Length of a vector. [5M]	1	L2
13	A. Define a matrix and explain three ways of creating a matrix [5M] B. Write about list and its syntax and explain about accessing list components [5M]	2	L2
OR			
14	Explain briefly about applying functions to matrix rows and columns [10M]	2	L2
15	Explain str(), attr() , substring(), paste() and length() [10M]	3	L2
OR			
16	A. Write an R program to add two vectors of integer's type and length 3. [5M]	3	L2

	B. Explain aggregate () and cut () function. [5M]		
17	List the control statements in R Programming with syntax and example. [10M]	4	L2
	OR		
18	Explain with syntax: i) cumulative sums, ii) cumulative products iii) min iv) pmin. [10M]	4	L2
19	Explain plot(), ggplot() and ggplot2() [10M]	5	L2
	OR		
20	Explain functions that are accessing through keyboard. [10M]	5	L2