



R20 Regulation

Subject code: 3P3HB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech III Semester Supplementary Examinations, July 2024

R PROGRAMMING

(CSE(DS))

Maximum Marks: 70

Date:27.07.2024 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 vectorized function.	1	L1
2	Define regression analysis.	1	L1
3	Create a byrow() matrix.	2	L1
4	Define apply functions in matrix.	2	L1
5	Write syntax to convert a vector into DataFrame	3	L1
6	Write any three characteristics of data.frame.	3	L1
7	Define max and min.	4	L1
8	Write about order () function.	4	L1
9	Define bar chart with syntax.	5	L1
10	Write about grepexpr() function.	5	L2

Part-B

Answer All the following questions. (5X10M=50Marks)			
11	Differentiate list, matrix, data frame, and scalar. [10M]	1	L2
OR			
12	Write about R data structures and explain with suitable examples. [10M]	1	L1
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	a) Define Vector and a Factor and differentiate them. [5M] b) Explain how to merge two data frames with example. [5M]	3	L2
OR			
16	a) Define contingency table by syntax with 2 different examples. [5M] b) Explain about cumsum(),cumprod() with suitable examples. [5M]	3	L2

17	List the control statements in R Programming with syntax and example. [10M]	4	L2
	OR		
18	Explain about set operations in R. [10M]	4	L4
19	a) Define Bar plot. How to create a bar plot of data for the chart by giving a chart file name & saving a file? [5M] b) Define Histogram with its Syntax & How to create a histogram by giving a chart by giving a chart file name & saving a file? [5M]	5	L3
	OR		
20	Explain functions that are accessing through keyboard. [10M]	5	L2