



R20 Regulation

Subject code:3P4GC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech IV Semester Supplementary Examinations, December 2025

R PROGRAMMING

CSE(AI&ML)

Maximum Marks: 70

Date: 30.12.2025

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 a list with its syntax.	2M	1	L1
2	Define Array with syntax.	2M	1	L1
3	Create a byrow() matrix.	2M	2	L1
4	Write general form of apply () for matrices.	2M	2	L1
5	Write syntax to convert a vector into Factor.	2M	3	L1
6	Write any three characteristics of data frame.	2M	3	L1
7	Define cumulative distribution functions (cdf).	2M	4	L1
8	Write about order () function.	2M	4	L1
9	Define grep(),regexr().	2M	5	L1
10	Give a syntax for "what" attribute in scan () function.	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	Differentiate vector, list, matrix, data frame, and scalar.	10M	1	L2
13	Define a matrix and Create a matrix for add, delete rows and columns from the matrix.	10M	2	L2
OR				
14	a) Explain rbind(), cbind() for adding rows and columns to a matrix. b) Describe about naming matrix rows and columns.	5M 5M	2	L2
15	a) Define Vector and a Factor and differentiate them. b) Explain how to merge two data frames with example.	5M 5M	3	L2
OR				
16	a) Define contingency table and explain table(). b) Explain aggregate () and cut () function.	5M 5M	3	L2

17	a) Write the difference between sort () and order (). b) Explain Scope and Environment in R.	5M 5M	4	L2
	OR			
18	Explain about math and set operations in R.	10M	4	L2
19	Write about abline(), points(), legend(), text(), locator().	10M	5	L2
	OR			
20	Explain functions that are accessing through keyboard and monitor.	10M	5	L2