



R18 Regulation

Subject code: 2P6EB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, December 2024

R PROGRAMMING

(CSE)

Maximum Marks: 70

Date:04.01.2025

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 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)

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|----|---|
| 1 | How to create and execute a R script. |
| 2 | What are the differences between NA and NULL? |
| 3 | Write about general matrix operations? |
| 4 | How to create Lists in R? |
| 5 | Explain the importance of data frame? |
| 6 | List out common functions used with Factors in R? |
| 7 | Write about Boolean operators in R? |
| 8 | Describe 3 math functions in R? |
| 9 | Explain dnorm() function? |
| 10 | How to access the Internet in R. |

Part-B

Answer All the following questions. (10MX 5=50Marks)

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| 11 | A. Explain different data structures in R. (5M)
B. Discuss about Common Vector Operations in R. (5M) |
| | OR |
| 12 | A. Illustrate the concept of Vectorized operations in R. (5M)
B. What effect does concatenate function has on vectors? Explain with an example? (5M) |
| 13 | A. How to apply same functions to all rows and columns of a matrix? Explain. (5M)
B. Write R code to generate first n terms of a Fibonacci series? (5M) |
| | OR |
| 14 | How to create a list and demonstrate the ways of accessing a list component? (10M) |
| 15 | A. Explain matrix like operations performed on data frames. (5M)
B. Illustrate the process of merging two data frames in R. (5M) |
| | OR |
| 16 | A. Explain the usage of any five table related functions in R. (5M)
B. Explain functions used with factors in R. (5M) |

17	A. Explain control statements in R with examples. (5M) B. Demonstrate recursion with an example using R. (5M)
	OR
18	A. Explain any five math functions in R with suitable examples. (5M) B. Explain any five statistical functions in R with suitable examples. (5M)
19	Explain commands to read and write files in R. Illustrate with an example. (10M)
	OR
20	A. Write any five string handling functions with examples. (5M) B. Explain importance of scatter graphs and give an example. (5M)