



Regulation R18

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

Subject code: 2P6EB

B.Tech III Semester Supplementary Examinations, January 2023 R PROGRAMMING

(CSE)

Maximum Marks: 70

19/01/2023

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)

- 1 Define a list with its syntax.
- 2 Define Array with syntax.
- 3 Create a byrow() matrix.
- 4 Define apply functions in matrix.
- 5 What is contingency table? *
- 6 Write syntax to Extract sub data frame.
- 7 What is assignment operator?
- 8 Write any two differences between data frame and data table.
- 9 Define grep(), regexpr().
- 10 Give a syntax for "what" attribute in scan () function.

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 a) What are the similarities and dissimilarities of Python and R.? [5M]
a) Differentiate filtering and subset (). [5M]
OR
- 12 Explain and differentiate NA and NULL with an example by applying mean () and mode (). [10M]
- 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]
OR
- 14 Explain briefly about applying functions to matrix rows and columns [10M]
- 15 Explain the following terms with syntax and examples [10M]
a) rbind() b) cbind(), c) apply().
OR
- 16 a) Explain how to merge two data frames with example. [5M]
b) Explain aggregate () and cut () function. [5M]
- 17 a) What is anonymous function and explain replacement function. [5M]
b) Write a program to print squares of numbers in a given range by using functions. [5M]

OR

- 18 a) Explain random number generation statistical distribution functions. [5M]
b) Find the minimum and maximum for 14, 23, 16, 20, 0, -17, and 100. [5M]
- 19 Write about abline(), points(), legend(), text(), locator(), polygon(). [10M]
- OR
- 20 Explain functions that are accessing through keyboard. [10M]