ANURAG GROUP OF INSTITUTIONS
Autonomous
School of Engineering
III-B.Tech-II-Semester Regular Examinations, July / August - 2021
Subject: R Programming
(Only CSE)

Time: 3 Hours   Max Marks:75

Section – A (Short Answer type questions)

- Answer all questions   (25Marks)

1. What is data type? List out various data types supported by R.   2M
2. Explain the terms Naming Vectors, Vector Arithmetic and Vector Subsetting.   3M
3. Explain the concept of converting Lists to Vectors.   2M
4. Illustrate the subsetting Data Frames and Extending Data Frames.   3M
5. Explain the process of installation and loading packages in R programming.   2M
6. Write R syntax for repeat loop and explain with example.   3M
7. Discuss about histogram with syntax in R.   2M
8. How to add or change the R Plots's Legend?   3M
9. Write a R program to read the CSV file and display the content.   2M
10. What is the importance of Goodness of Fit Test explain with an example.   3M

Section—B (Essay questions)

- Answer all questions, each question carries equal marks   (5 x 10 =50 Marks)

11. A) Write R program to create a matrix taking a given vector of numbers as input and define the column and row names. Display the matrix.   10M

OR

B) What is an array? Write R syntax for creating and accessing array elements with suitable example.   10M

12. A) Create a Data Frame for student data and explain the Factors by comparing Ordered factors.   10M

OR

B) Demonstrate Conditional and Control Flow in R Programming.   10M

13. A) i) Write a R program to compute cumulative sum, and cumulative product of a given vector elements.   4M
   ii) Write a R Program to find the factorial of a number using iterative programming. 6M

OR

B) Explain the concepts of Nested Functions and explain various scoping of functions.   10M

14. A) How to Plot Multiple Lines or Points? Explain the procedure to save a Plot as an image on disc.   10M

OR

B) Write short notes on i) apply ()   ii) sapply()   iii) lapply()   and iv) tapply()   10M

15. A) Write the syntax to import various Binary Files and plot a graph.   10M

OR

B) Write short notes on i) Time series analysis and ii) Regression   10M