R PROGRAMMING LAB
(Skill Based Lab Elective-I)

Course Code: 15CS11S1 **1 Credit**

Pre-requisites:

Any Programming Language.

Course Outcomes :

At the end of the Course, the Student will be able to:

CO 1 Setup R Programming Environment.

CO 2 Understand and use R – Data types.

CO 3 Understand and use R – Data Structures.

CO 4 Develop programming logic using R – Packages.

CO 5 Analyze data sets using R – programming capabilities

LIST OF EXPERIMENTS:

1. Download and install R-Programming environment and install basic packages using install.packages() command in R.
2. Learn all the basics of R-Programming (Data types, Variables, Operators etc,.)
3. Write a program to find list of even numbers from 1 to n using R-Loops.
4. Create a function to print squares of numbers in sequence.
5. Write a program to join columns and rows in a data frame using cbind() and rbind() in R.
6. Implement different String Manipulation functions in R.
7. Implement different data structures in R (Vectors, Lists, Data Frames)
8. Write a program to read a csv file and analyze the data in the file in R.

9. Create pie chart and bar chart using R.

10. Create a data set and do statistical analysis on the data using R.

TEXT BOOK:

Norman Matloff, The Art of R Programming, UC Davis 2009.

WEB REFERENCE:

https://www.r-project.org/