MARIS STELLA COLLEGE (AUTONOMOUS), VIJAYAWADA -8 (Affiliated to Krishna University, Machilipatnam) SYLLABUS

Subject: Computer Science Course Title: R Programming – Practical No of Hours: 30 Hrs. LTP: 002 Semester: V/VI Course Code: 20CSP511RP1 Credits: 1

Objectives

- To practice the R syntaxes and write programs.
- To identify and program the R concepts and techniques.

Course Outcomes

CO1: Load data in to R.

- **CO2:** Organize data in the form of R objects and manipulate them as needed.
- **CO3:** Perform analytics using R programming.

List of Practicals:

- 1. Create a vector in R and perform operations on it.
- 2. Create integer, complex, logical, character data type objects in R and print their values and their class using print and class functions.

3. Write code in R to to demonstrate sum(), min(), max() and seq() functions.

4. Write code in R to manipulate text in R using grep(), toupper(), tolower() and substr() functions.

5. Create data frame in R and perform operations on it.

6. Import data into R from text and excel files using read.table () and read.csv () functions.

- 7. Write code in R to find out whether number is prime or not.
- 8. Print numbers from 1 to 100 using while loop and for loop in R.
- 9. Write a program to import data from csv file and print the data on the console.
- 10. Write a program to demonstrate histogram in R.

Skill/Hands-on: Field work/Mini Project

• Analyze the pass percentage of an institution and use the customized graphs to represent the data.

(30 Hrs.)

Reference Book

 R in Action - Robert L. Kabacoff, Latest Edition – Second, Formats Available – paperback, Publisher - Dreamtech Press.

MARIS STELLA COLLEGE (AUTONOMOUS), VIJAYAWADA-8 (Affiliated to Krishna University, Machilipatnam) Practical-Scheme of Valuation

Time: 3 Hrs.

Max. Marks: 50

| Practical | Marks |
|-------------------|-------|
| Program Writing | 15 M |
| Program Execution | 15 M |
| Viva | 10 M |
| Practical Record | 10 M |
| Total | 50 M |