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

Subject: Computer Science Semester: IV

Course Title: Object oriented Course Code: 20CSP4PJ42

programming through Java - Practical

No of hours: 30 LTP: 002 Credits: 2

### **Objectives**

 To learn basic Java language syntax and semantics to write Java programs.

 To design and implement object oriented programming concepts in Java.

#### **Course Outcomes**

CO1: Write Java application programs using OOP principles CO2: Develop Java programs to solve real world problems CO3: Develop skills in internet programming using applets

## List of practicals

- 1. Write a program to read **Student Name, Reg. No, Marks[5]** and calculate **Total**, **Percentage, Result**. Display all the details of students
- 2. Write a program to perform the following String Operations
  - a. Read a string
  - b. Find out whether there is a given substring or not
  - c. Compare existing string by another string and display status
  - d. Replace existing string character with another character
  - e. Count number of works in a string
- 3. Java program to implements Addition and Multiplication of two N X N matrices.
- 4. Java program to demonstrate the use of Constructor.
- 5. Calculate area of the following shapes using method overloading.
  - a. Triangle
  - b. Rectangle
  - c. Circle
  - d. Square
  - 6. Implement inheritance between *Person (Aadhar, Surname, Name, DOB, and Age)* and *Student (Admission Number, College, Course, Year)*classes where ReadData(), DisplayData() are overriding methods.

- 7. Java program for implementing Interfaces
- 8. Java program on Multiple Inheritance.
- 9. Java program for to display **Serial Number from 1 to N** by creating two Threads
- 10. Java program to demonstrate the following exception handlings
  - a. Divided by Zero
  - b. Array Index Out of Bound
  - c. File Not Found
  - d. Arithmetic Exception
  - e. User Defined Exception
- 11. Create an Applet to display different shapes such as Circle, Oval, Rectangle, Square and Triangle.
- 12. Write a program for counting number of characters in a file

# 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