II Year II Semester   **L   T   P   C**

Code:20ES4109   **0   0   3   1.5**

JAVA PROGRAMMING LAB

Course Objectives:

This course is designed to:
1. To understand object oriented concept
2. To become familiar with classes and objects
3. Understand various kinds of methods
4. Introduce built-in and user defined exceptions
5. To become familiar the concepts of AWT

Course Outcomes:

At the end of the course the student will be able to
1. Create simple applications using classes, objects and inheritance
2. Apply parallel processing applications using threads
3. Develop GUI applications using AWT

Exercise - 1 (Basics)

a) Write a JAVA program to display default value of all primitive data type of JAVA.
b) Write a case study on public static void main (250 words).
c) Five Bikers Compete in a race such that they drive at a constant speed which may or maynot be the same as the other. To qualify the race, the speed of a racer must be more than the average speed of all 5 racers. Take as input the speed of each racer and print back the speed ofqualifying racers.

Exercise - 2 (Control -flow)

a) Write a JAVA program to search for an element in a given list of elements using binarysearch mechanism.
b) Write a JAVA program to sort for an element in a given list of elements using bubble sort

Exercise - 3 (Class, Objects)

a) Define a class called CalAge. This class is used to calculate age of a person from her or his date of birth and the current date. Include a mutator method that allows the user to enter her orhis date of birth and set the value for current date. Also include a method to return the age inyears and months (for example, 25.5 years) as a double value. Include an additional method to check if the date of birth entered by the user is a valid one. For example, 30 February 2008 isan invalid date. Embed your class in a test program.