I Year II Semester

Code: 20ES2108

L T P C 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 Applets, 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 applications GUI applications using Applets/AWT

Exercise-1(Basics)

- Write a JAVA program to display default value of all primitive data type of JAVA
- Write a java program that display the roots of a quadratic equation $ax^2+bx=0$. Calculate the discriminate D and basing on value of D, describe the nature of root.
- Write a case study on public static void main (250 words)

Exercise-2(Control-flow)

• Write a JAVA program to print a table for a given number for, while and do-while loops.

Exercise-3(Strings)

• Write a JAVA program to demonstrate String handling methods

Exercise-4(Class, Objects)

- Write a JAVA program to implement class mechanism. Create a class, methods and invoke them inside main method.
- Write a JAVA program to implement constructor.

Exercise-5(Static)

• Write a JAVA program to describe the usage of static keyword. (static keyword in front of a variable, method and a class)

Exercise-6(Methods)

- Write a JAVA program to implement constructor overloading.
- Write a JAVA program to implement method overloading.

Exercise-7(Inheritance)

- Write a JAVA program to implement Single Inheritance
- Write a JAVA program to implement multi level Inheritance

Exercise-8(Inheritance -Continued)

- Write a JAVA program give example for "super" keyword.
- Write a JAVA program to implement Interface. What kind of Inheritance can be achieved

Exercise-9(Exception)

- Write a JAVA program that describes simple exception handling mechanism.
- Write a JAVA program Illustrating Multiple catch clauses

Exercise-10(Threads)

• Write a JAVA program that creates threads by extending Thread class .First thread display "Good Morning "every 1 sec, the second thread displays "Hello "every 2 seconds and the third display "Welcome" every 3 seconds ,(Repeat the same by implementing Runnable)

Exercise–11(Threads)

• Write a program to illustrate any 10 built-in functions in Thread class (Ex: is Alive and join())

Exercise-12(Applet)

• Write a JAVA program to Demonstrate Applet application

Exercise-13(Applet)

• Write a JAVA program to create different shapes and fill colors using Applet

Exercise-14(AWT)

• Write a JAVA program to demonstrate the usage of events, components in AWT. (Simple Front End application with Labels, Text Boxes and Buttons)

Exercise-15(AWT)

• Write a JAVA program that to demonstrate Mouse Handling