Department of Computer Science & Engineering, SDMCET, Dharwad - 2

Semester: **IV**   **Course Code: 22UCSL403**

Course Title: **Object Oriented Programming Laboratory**   **Division: A (A1, A2, A3)**

Academic Year: 2023-24

Practice Programs-4

1) Write a Java program that provides a generic sort method that can sort elements of any reference type. [Hint: use compareTo () method available in Comparable<T> interface]

2) Student in SDMCET is identified by USN, first name, last name, branch and division. Write a Java program using generics to provide facility to sort the students based on USN, first name and division. The sort option is to be read by the user.
[Hint: The program must implement compareTo() method available in Comparable<T> interface]

3) Postgraduate course of the CSE department can accommodate a maximum of 20 students. Each PG student in the department is identified by his/her Roll No, USN, Name, Semester and Mobile Number. Using appropriate Collection class, write a Java Program to simulate the following scenarios:

    i)   On request, the capacity was increased from 20 to 25

    ii)   Only 3 students enroll for the course

    iii)   Two students bearing Roll Numbers 2 and 3 voluntarily unroll from the course

    iv)   After a month, two students get enrolled in the course

    v)   Print the information of all the students currently enrolled in the course