## Indian Institute of Technology Mandi February-June 2017 Semester

## CS202: Advanced Data Structure and Algorithms Programming Assignment 1

Last date of submission of code: 20th February, 2017

Implement the following sorting algorithms using C++ programing language and sort the input sequence in **ascending order**.

- a) Insertion sort
- b) Selection sort
- c) Rank sort
- d) Buble sort

Program should take *n* inputs given from the user and display the sorted sequence.

## Note:

- 1. Each array is implemented using the sequential linear list data structure (seqLinearList.hpp).
- 2. Everyone should use the seqLinearList.hpp and sorting.hpp classes provided. Do not change the class names. It is expected to strictly use the interfaces provided in the classes to implement the tasks.
- 3. Use the timer.hpp to record the running time of each sortig algorithm.