

DATA STRUCTURES

BATCH – B

[WEDNESDAY FEBRUARY 24, 2020: 3:00 PM – 6:00 PM]

ASSIGNMENT – 5

CODE: assign05

INSTRUCTIONS:

[Total Marks: 20]

- i) Read all assignments and each problem has to be answered in the same c file.
- ii) Create a .c file following the file name convention: **abc-assign05.c**
Where **abc** is your roll number and **assign05** is the assignment code
- iii) Strictly follow the file name convention and do not use **scanf()**

PROBLEMS:

1) [Marks: 10 marks]

Given a Binary Heap and a new element to be added to this Heap. The task is to insert the new element to the Heap maintaining the properties of Heap.:

A = { 1, 3, 6, 5, 9, 8 }

Insert new element as -2. Construct a min heap using array implementation.

2) [Marks: 10 marks]

Given a Binary Heap and an element present in the given Heap. The task is to delete max element from this Heap maintaining the properties of Heap. Do it iteratively and give a descending order of elements.

Array A=25, 14, 16, 13, 10, 8, 12