Quiz #02

25 March 2019 20 minutes

**Name**: **Roll No**:

**Honor Code**: By signing below, I am declaring under oath that

I will solve the quiz by myself solely and will not

Take any help from neighboring fellows. Signature

**A.** Sort the following complexity classes in increasing order**.** [10]

𝑂(𝑛 log 𝑛), 𝑂(𝑛2 log 𝑛), 𝑂(𝑛), 𝑂(1), 𝑂(𝑛𝑛), 𝑂(log 𝑛), 𝑂(2𝑛), 𝑂(log3 𝑛)

Complexity Ordering Functions from the list above

1 (Most efficient)

2

3

4

5

6

7

8 (Least efficient)

**B.** What are the BIG-Three, just write names. [3]

**C.** Briefly and precisely describe Object and Comparable (ref: Mark Alan Weiss Book, Ch 01). [7]

**D.** Write the following member function of the LinkedList class to append a list, passed as argument, at its tail.

LinkedList class have a node (self-referencing) pointer **head** points to the start of the list. [10]

void LinkedList::append(const LinkedList &lst)

**E.** Again, write the following member function of the LinkedList class to append a list, passed as argument, at its tail. LinkedList class have a two node (self-referencing) pointers **head** and **tail** points to the first and last nodes of the list respectively. [10]

void LinkedList::append(const LinkedList &lst)