No. of Printed Pages : 1

SET - 1

Advanced Diploma in Information Technology (ADIT) / Bachelor in Information Technology (BIT) 00870

Term-End Practical Examination

June, 2010

CST-103P : DATA STRUCTURES AND ALGORITHM

Time allowed : 1 hour

Maximum Marks : 30
(Weightage : 25%)

Note : *There are **two** questions of **10 marks** each in this paper. Both are **compulsory**. Remaining **10 marks** are for viva-voce.*

1. Write a program in 'C' language that reads a finite number of integers, in some random order and then sorts the list of these integers in descending order. You may use any one of the following sorting algorithms : **10**

(i) Bubble Sort

(ii) Quick Sort

(iii) Insertion Sort

Finally, the program writes a suitable statement in this respect, mentioning clearly the name of the sorting algorithm used.

2. The Fibbonacci sequence : **10**

0, 1, 1, 2, 3, 5, 8, ...

is defined such that the nth term, with $n \geq 2$, is the sum of the previous two terms. Also, the first and second terms are respectively 0 and 1. Write a program in 'C' that computes the nth term of the sequence. Finally, the program writes a suitable statement in this regard.
