

Sardar Vallabhbhai National Institute of Technology, Surat

Design and Analysis of Algorithms

Test

Exam Date : 27/10/2017

Exam Time : 2:00 PM to 2:30 PM

Total Marks : 20

Instructions :

1. Write your roll no. and other necessary details clearly on Answer book and Question Paper.
 2. Assume necessary data but give proper justification.
 3. Be precise and clear in answering all questions.
 4. Figure to the right indicate full marks of that question.
 5. Please start answer to new question on new page.
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Q-1 Answer the Following

[8]

- 1) Write Algorithm for sorting an array according to absolute difference with given value.
- 2) Write algorithm using iterative function to find sum of n numbers.
- 3) Write an algorithm using Recursive function to find sum of n numbers.
- 4) Define average step count.

Q-2 Answer the Following

[12]

- 1) What is the maximum and minimum problem?
- 2) Define internal path length.
- 3) What is the substitution method?
- 4) Write the Control abstraction for Divide-and conquer.

ALL THE BEST!