

Philadelphia University



Student Name:

Faculty of Engineering

Student Number:

Dept. of Computer Engineering

First Quiz, First Semester: 2010/2011

Course Title:	Algorithms and Data Structures	Date:	11/11/2010
Course No:	630231	Time Allowed:	10 minutes
Lecturer:	Dr. Qadri Hamarsheh	No. Of Pages:	1

Information for candidates

1. This Quiz paper contains 1 question totaling 5 marks
2. The marks for parts of question are shown in round brackets.

Advices to candidates

1. You should attempt all sub questions.
2. You should write your answers clearly.

Question 1

(5 marks)

- a) Characterize the following algorithm n terms of Big-O notation. Also find the exact number of additions, subtractions, and multiplications executed by the loop. *(2 marks)*

```
for(int i=5; i<=2*n;i++)  
cout << 2*n+i-1 << endl;
```

- b) Add the function **min** to the class **arrayListType** using template mechanism to return the smallest element of the list. Also, write the definition of the function **min**. *(3 marks)*

GOOD LUCK