# 

## **QUIZ (2)**

## **Model Answer**

## **GS 211 Data Structure and Algorithms in Java**

**NAME: ID:**

# **Question 1.** Find the running time as a function F(*n*) of input size *n* in each of the following cases. Express the growth rate of the function in Big O notation.

1. [1 point]

void printFirstElementOfArray(int arr[]) **1**

{

printf("First element of array = %d",arr[0]); **1**

}

F(n)=…………………**2**………………………………

Big-O=……………**o(1) …………………………**

1. [2 point]

void printAllElementOfArray(int arr[], int n) **1**

{

for (int i = 0; i < n; i++) **n+1**

{

printf("%d\n", arr[i]); **n**

}

}

F(n)=………**2n+2**…………………………………………

Big-O=…………………**O(n)** ……………………

**Question 2.** Express the following functions in terms of Big-O

1. **F(n)= 17**

Big-O=…**O(1)**……

1. **F(n)=2n2+n**

Big-O=…**O(n2)** ……