|  |  |
| --- | --- |
| No. of Pages | 2 |
| No. of Questions | 2 |
| Total Marks | 20 |
| **Time**: 50 minutes | |

**Department of Computer Science and Engineering**

A

**MIDTERM EXAMINATION Fall 2017**

**CSE 110: Programming Language I**

**CSE 161: Computer Programming**

* Write intial (AAR/DIP/MSN) of theory teacher and section on top of the answer script
* Answer all questions. Use the answer script for rough work.
* Answer Question 1 at the **beginning part** of answer script.
* Write answer of Question 2 **on the question paper**.
* Figure in bracket [] next to each question indicates marks for that question.
* At the end of exam, put **question paper** inside answer script and **return both**.
* Understanding the question is part of the exam, please do not ask questions. **No washroom breaks.**

Section: \_\_\_\_ ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Name in CAPITAL: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Names/initials of Lab Teachers \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lab Room Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Lab Day and Time\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Question 1 [10 Points]**

**[Answer on the answer-script]**

Draw the **flowchart** of a program that asks the user for the value of ***n*** as input

and then prints value of **y**.

y = 3 - 5 + 7 - 9 ….. nth term

Example:

If user gives n=1, print 3.

If user gives n=2, print -2.

If user gives n=3, print 5.

and so on.

**Question 2 [10Points]**[answer on question paper]

|  |
| --- |
| **public class Q2B** |
| **{** |
| **public static void main(String[] args)** |
| **{** |
| **int x = 1, y = 0, sum = 0;** |
| **while (x < 10){** |
| **y = 40;** |
| **while (y > 22){** |
| **if ((sum > 20) && (sum < 60))** |
| **{** |
| **sum += x \* 2;** |
| **}** |
| **else** |
| **{** |
| **sum += 23;** |
| **}** |
|  |
| **if ((sum > 40) && (sum < 100))** |
| **{** |
| **sum += x \* 3;** |
| **}** |
| **System.out.println(sum+y);** |
| **y -= 10;** |
| **}** |
| **x += 2;** |
| **}** |
| **}** |
| **}** |

**Show output of the above program:**

[Answer on the question paper. **There are NO errors / mistakes in this question. The question is correct.**]

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |