**Arab Academy For Science and Technology & Maritime Transport**

**College of Engineering & Technology**

**Computer Engineering Department**

**EXAMINATION PAPER – Week 12**

Course Title: Introduction to Programming

Course Code: CC114

Date: Tues. May, 02-2016 Lecturer: Dr. Manal Helal

Time allowed: 60 mins Start Time: 12:30 p.m.

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| Student's name: Reg.# : |

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| **Question #** | **Marks** |
| **Available** | **Actual** |
| MCQ | 5 |  |
| Programming  | 10 |  |
| **Total** | **15** |  |
| **Lecturer** | Name : Dr. Manal Helal |
| Signature : |
| Date: |

**MPC6/1-1**

**MCQ: [5 points]**

**1) To get the number of items stored in a ListBox, use the \_\_\_\_\_\_\_\_ property. 1) \_\_\_\_\_\_\_**

A) Items B) Count C) Number D) Items.Count

**2) The first item in a ListBox has an index of \_\_\_\_\_\_\_\_. 2) \_\_\_\_\_\_\_**

A) Items.Count B) 1 C) 0 D) -1

**3) What is wrong with the following code? 3) \_\_\_\_\_\_\_**

**Dim** intIndex **As** **Integer**

**For** intIndex = 5 **To** 1

 ListBox.Items.Add(intIndex.ToString)

**Next**

A) intIndex is declared incorrectly for use with this type of loop.

B) A For Next loop cannot be used to count backward.

C) You need to specify a negative step value in order to execute this loop.

D) The Next statement must read Next intIndex.

**4) Which of the following code fragments calculates the average of 5 numbers input with an input box, and displays the result in lblResult? 4) \_\_\_\_\_\_\_**

|  |  |
| --- | --- |
| A) intCount = 0intSum = 0**Do While** intCount <= 5 intValue = InputBox("enter a number") intSum = intSum + intValue intCount += 1**Loop**sngAvg = intSum / intCountlblResult.Text = sngAvg.ToString() | B) intCount = 5intSum = 0**Do While** intCount = 5 intSum = InputBox("enter a number") sngAvg = intSum / intCount lblResult.Text = sngAvg.ToString()**Loop** |
| C) intCount = 0intSum = 0**Do While** intCount <=5 intValue = InputBox("enter a number") intSum = intSum + intValue**Loop**sngAvg = intSum / intCountlblResult.Text = sngAvg.ToString() | D) intCount = 0intSum = 0**Do While** intCount < 5 intValue = InputBox("enter a number") intSum = += intValue intCount += 1**Loop**sngAvg = intSum / intCountlblResult.Text = sngAvg.ToString() |

**5) How many times will the message I love Visual Basic be displayed? 5) \_\_\_\_\_\_\_**

**Dim** intCount **As Integer** = 0

**Do**

 lstOutPut.Items.Add("I love Visual Basic")

 intCout += 1

**Loop While** intCount > 10

A) It will display 2 times. B) It will display 10 times.

C) It will display once. D) It will not be displayed at all.

**Programming: [10 points]**

**6) What will appear in listbox1 after running the following loops? 6) \_\_\_\_\_\_\_**

|  |  |
| --- | --- |
| A)**Dim** index **As Integer** = 0**Do While** index <= 10 listBox1.Items.Add(index.ToString)  index += 1**Loop** | B)**Dim** index **As Integer** = 0**Do** listBox1.Items.Add(index.ToString)  index += 1**Loop Until** index > 10 |
| C)**For** Index **As Double** = 2 **To** 0 **Step** -0.25 listBox1.Items.Add(Index.ToString)**Next** | D)**For** Index = 15 **To** 2  listBox1.Items.Add(Index.ToString)**Next** |

7) Write a loop to compute the quarterly payments of a car loan given as input the loan amount and the annual interest rate, and for number of years from 2 to 5. **7) \_\_\_\_\_\_\_**



Answers:

1) D

2) C

3) C

4) D

5) C

6) A) Output: 0 1 2 3 4 5 6 7 8 9 10

B) Output: 0 1 2 3 4 5 6 7 8 9 10

C) Output: 2 1.75 1.5 1.25 1 0.75 0.5 0.25 0

D) nothing

7)

Dim loan As Double = Val(txtLoan.Text)

Dim annualrate As Double = Val(txtRate.Text) / 100

Dim quqrtRate As Double = annualrate / 4

listBox1.Items.Clear()

listBox1.Items.Add("Quarters" & ControlChars.Tab & ControlChars.Tab & "Payment Amount")

For years = 2 To Val(txtYears.Text)

 Dim quarters As Integer = years \* 4

 Dim qamount As Double = Pmt(quqrtRate, quarters, -loan)

 listBox1.Items.Add(quarters & ControlChars.Tab & ControlChars.Tab & String.Format("{0:C}", qamount))

Next