**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: Wed. May, 04-2016 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) This method erases all the items in a ListBox. 1) \_\_\_\_\_\_\_**

A) Items.Clear B) Items.Delete C) Items.Remove D) Items.Erase

**2) Which of the following controls and methods provides a simple way to gather input from the user at runtime without placing a text box on a form? 2) \_\_\_\_\_\_\_**

A) MessageBox B) InputBox C) ComboBox D) ListBox

**3) What is the difference in the execution of the Do Until Loop (first example) and the Do Loop Until (second example)? 3) \_\_\_\_\_\_\_**

|  |  |
| --- | --- |
| 'First Example  sngPayAmount = 200  **Do Until** sngPayAmount > 150  sngPayAmount = sngPayAmount — 50  **Loop** | 'Second Example  sngPayAmount = 200  **Do**  sngPayAmount = sngPayAmount — 50  **Loop Until** sngPayAmount > 150 |

A) The first loop will execute one more time than the second loop.

B) Both loops are executed in an identical manner.

C) The first loop will never be executed while the second is an infinite loop.

D) The first loop will never be executed while the second loop will execute once.

**4) Suppose you would like your code to perform several tasks: Use a For…Next loop with an InputBox to prompt the user four times for the price of four different T-shirts, then display each shirt price with a 25% discount in the ListBox lstResult. Which of the following code segments correctly performs these tasks? 4) \_\_\_\_\_\_\_**

|  |  |
| --- | --- |
| ***A)*** Dim price, disPrice As Single  For i = 1 To 4  price = InputBox("Enter price of shirt" &  i.ToString)  disPrice = price \* 0.25  ListBox1.Items.Add(i & " " & disPrice)  Next | ***B)*** Dim price, disPrice As Single  For i = 0 To 4  price = InputBox("Enter price of shirt" &  i.ToString)  disPrice = price - (0.25 \* price)  Next  ListBox1.Items.Add(disPrice) |
| ***C)*** Dim price, disPrice As Single  For i = 1 To 4  price = InputBox("Enter price of shirt" &  i.ToString)  disPrice = price \* 0.75  ListBox1.Items.Add(disPrice)  Next | ***D)*** Dim price, disPrice As Single  For i = 0 To 4  price = InputBox("Enter price of shirt" &  i.ToString)  disPrice = price \* 0.75  ListBox1.Items.Add(disPrice)  Next |

**5) Which statement is true in regard to the following code? 5) \_\_\_\_\_\_\_**

intCount = 0

**Do While** intCount < 10

lstOutput.Items.Add("Good Job")

**Loop**

A) This is an infinite loop.

B) The Items.Insert method should be used instead of Items.Add.

C) intCount should start at -1.

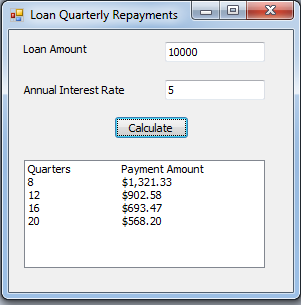
D) The text Good Job should not have quotation marks around it.

**Programming: [10 points]**

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

|  |  |
| --- | --- |
| A)  **Dim** index **As Integer** = 0  **Do**  listBox1.Items.Add(index.ToString)  index += 5  **Loop while** index <= 10 | B)  **Dim** index **As Integer** = 0  **Do Until** index <= 10  listBox1.Items.Add(index.ToString)  index += 3  **Loop** |
| C)  **For** Index **As Integer** = 20 **To** -20  listBox1.Items.Add(Index.ToString)  **Next** | D)  **For** Index = 30 **To** 5 **Step** -7  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) A

2) B

3) C

4) C

5) A

6) A) Output: 0 5 10

B) nothing

C) nothing

D) Output: 30 23 16 9

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