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

**College of Engineering & Technology**

**Computer Engineering Department**

**EXAMINATION PAPER – Week 7**

Course Title: Introduction to Programming

Course Code: CC114

Date: Tues. March, 30-2016 Lecturer: Dr. Manal Helal

Time allowed: 60 mins Start Time: 2:30 p.m.

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| Student's name: | Reg.#: |

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| **Question #** | **Marks** |
| **Available** | **Actual** |
| Visual Controls | 5  |  |
| Variables & Data Types  | 5 |  |
| Algorithms | 5 |  |
| Conditional Statements | 5 |  |
| **Total** | **20** |  |
| **Lecturer** | Name: Dr. Manal Helal |
| Signature: |
| Date: |

ALL MCQ are worth 1 mark each.

**MPC6/1-1**

**Visual Controls [5 points]**

**1) GUI stands for 1)\_\_\_\_\_\_\_**

A) graphical unit interface. B) graphical user interface.

C) graphing user introduction. D) graphical user input.

**2) Which of the following properties determines the words appearing in a form's title bar? 2)\_\_\_\_\_\_\_**

A) Caption B) Text C) Title D) Name

**3) The Properties window plays an important role in the development of Visual Basic programs. It is mainly used 3) \_\_\_\_\_\_\_**

A) to allow the developer to graphically design program components.

B) to set program related options like Program Name, Program Location, etc.

C) when opening programs stored on a hard drive.

D) to change how objects look and feel.

**4) What of the following is a correct statement for specifying the words to appear in the title bar of Form1? 4) \_\_\_\_\_\_\_**

A) Form1.TitleBar = "My Text" B) Me.Text = "My Text"

C) Me.Caption = "My Text" D) Form1.Text = "My Text"

**5) When the user clicks a button, \_\_\_\_\_\_\_\_ is raised. 5) \_\_\_\_\_\_\_**

A) a property B) a method C) a setting D) an event

**Variables & Data Types [5 points]**

**6) What is the correct statement when declaring and assigning the value of 100 to an Integer constant called MAX\_VALUE? 6)\_\_\_\_\_\_\_**

A) Dim MAX\_VALUE = Int(100) B) Dim MAX\_VALUE As Integer

C) Const MAX\_VALUE As Integer = 100 D) Integer MAX\_VALUE = 100

**7) Which of the following arithmetic operations has the highest level of precedence? 7)\_\_\_\_\_\_\_**

A) \*/ B) \ C) +- D) ^

**8) What will be the contents of the variable x after the following statement is executed?**

x = 6 - 2 ^ 2 \* 3 + 6 **8) \_\_\_\_\_\_\_**

A) 0 B) 54 C) 12 D) 18 E) None of the above

**9) Which value for x would make the following condition true: (x >= 5) And (x <= 6) 9)\_\_\_\_\_\_\_**

A) x is equal to 7 B) x is equal to 5 C) x is equal to 5.001 D) B and C

**10) The following lines of code are correct. 10) \_\_\_\_\_\_**

**If age >= 13 And < 20 Then**

 **txtOutput.Text = "You are a teenager."**

**End If**

A) True B) False

**Algorithms [5 points]**

**11) Write code to compute the total grade out of 50 for two exams entered by the user, and then compute the percentage.**

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**Conditional Statements [5 points]**

**12) The Hobbies Survey App displays the Hobbies selected by the user in a dialog grouped by Hobbies Type. Messages are based on the following rules:**

* If the user checks either the Reading or Painting Checkboxes (combined or alone), a dialog says that the user enjoy relaxation hobbies appear.
* If the user checks either the Football or Basketball Checkboxes (combined or alone), a dialog says that the user enjoy Sports hobbies appear.
* If the user chooses a relaxation type and sport type, a relevant dialog appears.
* If the user chooses Nothing Checkbox only, a relevant dialog appears.
* If the user chooses the Nothing checkbox and any other checkbox, an error message is displayed.

**Write the code to be written in the event handling subroutine of the button shown.**

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**Answers:**

1) B 2) B 3) D 4) B, D 5) D 6) C

7) D 8) A 9) D 10) FALSE

**11)** Dim Total As Double = Val(txtGrade1.Text) + Val(txtGrade2.Text)

 Dim Percent As Double = (Total / 50) \* 100

 lblTotal.Text = Total.ToString

lblPercent.Text = Percent.ToString

12)

If ChcN.Checked AndAlso (ChcR.Checked OrElse ChcP.Checked OrElse ChcF.Checked OrElse ChcB.Checked) Then

 MessageBox.Show("Invalid Choice")

ElseIf (ChcR.Checked OrElse ChcP.Checked) AndAlso Not (ChcF.Checked OrElse ChcB.Checked) Then

 MessageBox.Show("You Enjoy Relaxation")

ElseIf (ChcF.Checked OrElse ChcB.Checked) AndAlso Not (ChcR.Checked OrElse ChcP.Checked) Then

 MessageBox.Show("You Enjoy Sports")

ElseIf (ChcR.Checked OrElse ChcP.Checked) AndAlso (ChcF.Checked OrElse ChcB.Checked) Then

 MessageBox.Show("You enjoy both Sports and Relxation")

Else

 MessageBox.Show("You enjoy no hobbies")

End If