MALAYSIAN INSTITUTE OF INFORMATION TECHNOLOGY

FINAL EXAMINATION
SEPTEMBER 2016 SEMESTER

SUBJECT CODE	:	ISB 23203
SUBJECT TITLE	:	VISUAL PROGRAMMING
LEVEL	:	DEGREE
TIME / DURATION	:	2.00 pm – 4.30 pm (2 ½ HOURS)
DATE	:	26 MAY 2016

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.

2. This question paper is printed on both sides of the paper.

3. This question paper consists of ONE (1) section. Section A.

4. Answer ALL questions.

5. Please write your answers on answer booklet provided.

6. Answer all questions in English.

THERE ARE 6 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A (Total: 100 marks)

INSTRUCTION: Answer ALL questions.

Please use the answer booklet provided.

Question 1

(a) Write a declaration statement for

    i. an array of Integer's named `scores` with length of 10.

    ii. a constant variable name `greeting` and initialize it with `"Hello There"`.

(5 marks)

(b) Write the most appropriate Parse method for the following object. Create your own variable name.

    i. `txtSalesPrice.Text`

    ii. `txtNoOfStudent.Text`

(5 marks)

(c) Write a message box to display text message as

`"This program is programmed by Zehra"`,

the title bar text as "About", OK button and Information icon.

(5 marks)

(d) Write a For loop that finds the sum of the integers 5 through 10 and stores the final answer in the variable sum. Use the loop variable J in the For loop.

(5 marks)

(e) Given the following codes. What will be displayed when the following lines are executed?

i.
```
Dim Boy as string = "Ahmad"
Dim Girl as string = "Anis"
txtBox.Text = Boy & " and " & Girl & " are sibling."
```

ii.
```
Dim x As Double = 2
Dim y as Double = 4
Dim z As Double
z = x + (y / x)
x = y
z = x + z
lstBox.Items.Add(x + y + z)
```

(2 marks)

(f) List **THREE** ways to clear a text box named cityTextBox.

(3 marks)

Question 2

(a) Convert the following `If Else` statement into valid `Select Case` statement.

```
If decAverageScore >= 90 Then
    strGrade = "A"
ElseIf (decAverageScore >= 80) and (decAverageScore < 90) Then
    strGrade = "B"
ElseIf (decAverageScore >= 50) and (decAverageScore < 80) Then
    strGrade = "C"
Else
    strGrade = "F"
End If
```

(5 marks)

(b) You are have been assigned by your instructor to create simple vb.net system to calculate Body Mass Index (BMI) for each individual. The system will get user's weight(kg) and height(m) as an input. The BMI system will provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems. The indicator of BMI is based on Table 1. Formula to calculate body mass index = (weight)/(height * height)

BMI Category	BMI
Underweight	Less than 18.5
Normal Weight	18.5 – 24.9
Overweight	25 – 30
Obese	More than 30

Table 1

Write an event procedure for the above purpose. The event procedures are:

i.   The Button Calculate menu command should calculate and display the **BMI result** in message box. Use `If Else` or `Select Case` statement.

ii.   The Exit button is to exit the application.
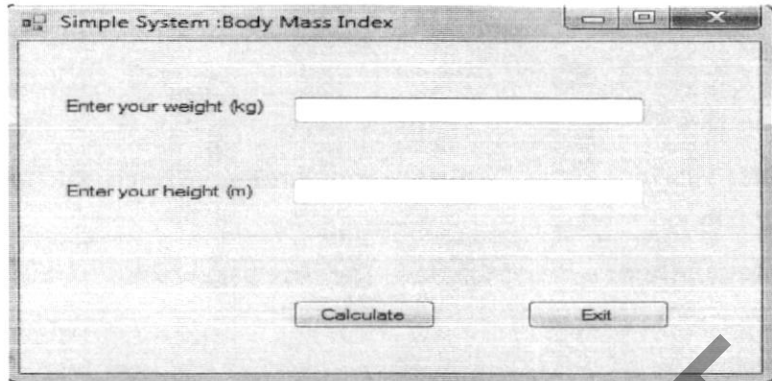
(20 marks)

The sample screen as below;
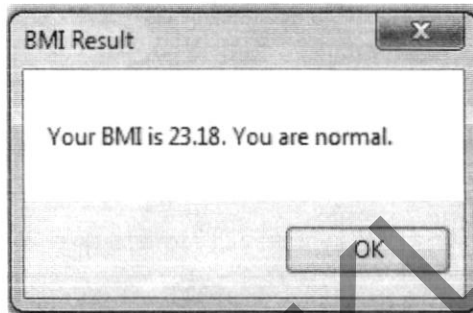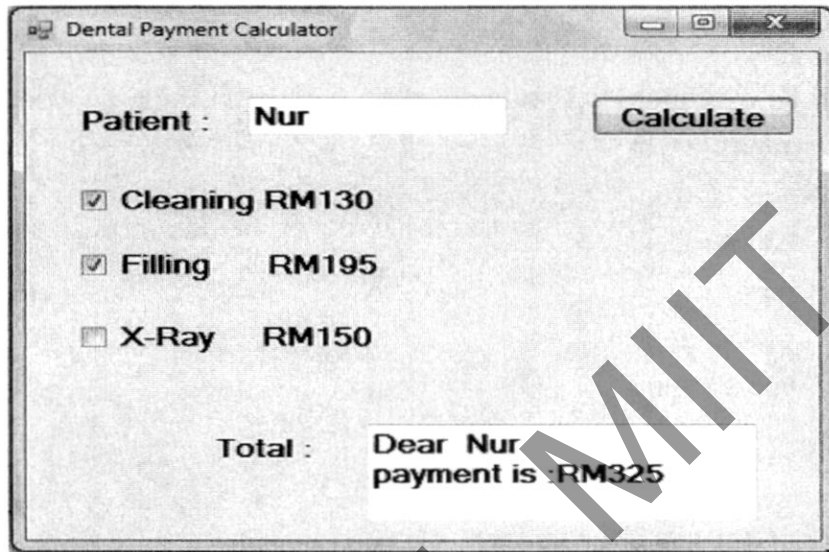

Figure 1: Sample screen for body mass index system

Figure 2: Sample message box for body mass index system
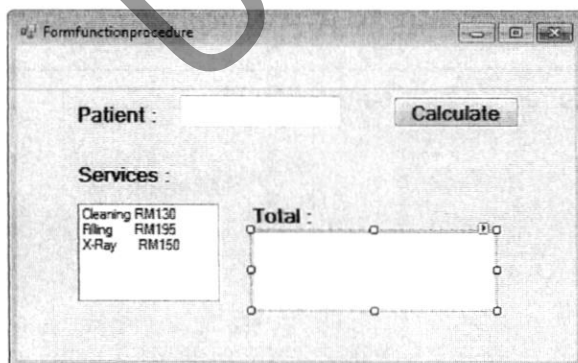
Question 3

(a)   Write declaration statements for the Dental Payment Calculator.

(5 marks)

(b)   Write Visual Basic.NET code in function procedure for the GUI below.

(15 marks)

(c)   Given partial segment code below, predict the sum output in the listbox.

```
Dim sum As Integer = 0
Dim count As Integer = 1

    While count <= 15
    sum += count
    Me.ListBox1.Items.Add(sum)
    count += 3

    End While
```

(5 marks)

Question 4

Design an interface and write a full program based for following scenario:

A project that calculates the total fat, carbohydrate and protein calories. Allow the user to enter (in text boxes) the grams of fat, the grams of carbohydrates and the grams of protein. Each gram of fat is nine calories; a gram of protein or carbohydrate is four calories. Display the total calories for the current food item in a text box. Use a message box to display an accumulated sum of the calories and a count of items entered.

(Note : Give name to the controls using a correct naming convention)

(25 marks)

END OF QUESTION