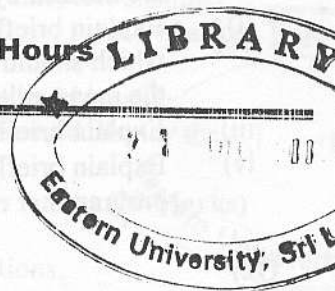


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Eastern University, Sri Lanka
Third Examination in Science (2002/03&03A)
Second Semester (April/May 2004)
OC 305 -Rapid Application Development

Answer All Questions

Time - Two Hours



Q1)

(a) Consider the following declaration in Visual Basic 6.0

```
Dim N1, N2, N3
```

What is the data type of N1? Explain.

(15 Marks)

(b) Consider the following lines of code in Visual Basic 6.0

```
myString = "Hello World"
```

```
myString = Left(myString, InStr(6, myString, "o", 1))
```

What would be the value in myString after executing the above code?

(15 Marks)

(c) Consider the following program segment in Visual Basic 6.0

Option Explicit

```
Private Sub Command1_Click()
```

```
Dim intNum1, intNum2, intSum As Integer
```

```
intNum1 = 5
```

```
intNum2 = 10
```

```
Form2.Show
```

```
Form2.Print Sum(intNum1, intNum2)
```

```
Form2.Print Sum(intNum1, intNum2)
```

```
End Sub
```

```
Public Function Sum(ByVal intA As Integer, ByVal intB As Integer) As Integer
```

```
Static intC As Integer
```

```
intC = intA + intB + intC
```

```
Sum = intC
```

```
End Function
```

What would be the output of the above program? Explain

(40 Marks)

(d) Entries in Column A of the following table have to be matched with those in Column B. Find the correct matching pairs.

(10 Marks)

Column A	Column B
(i) List Box	(A) Used as a group that define mutually exclusive options.
(ii) Combo Box	(B) Used to ask the user to choose one, two or maybe three different options.
(iii) OLE	(C) Used to display a list of items to the user.
(iv) Option Button	(D) Allows to insert objects from other applications.
(v) Check Box	(E) A combination of a text box and a list box.

- (e)
- (i) Visual basic forms can be used to host a menu bar. Give two methods that are utilized by Visual Basic to create these menus.
 - ii) Explain briefly, how the programmer define which menu should be at the top, which should be sub-items, and how the order can be controlled with regard to the menu editor.
 - iii) Explain briefly how you would use mouse to add controls to a form.
 - iv) Explain briefly, what would happen to a control's event procedure when the programmer renames the control.

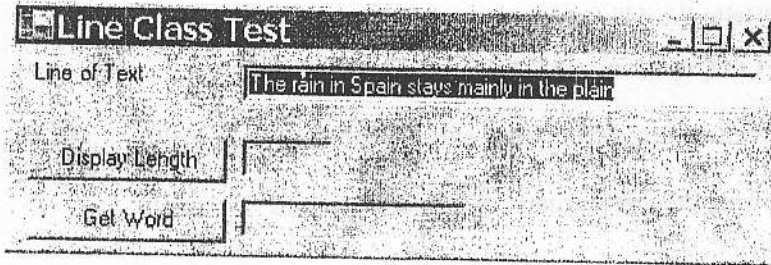
(4* 5 Marks)

Q2)

- (a) Write down the necessary steps to connect Database using "Data Environment" "ADO", "DAO"

(30 Marks)

(b)



The form in figure was created using VB.net. It contains two command buttons three text boxes and a label.

Write down the necessary steps to create the programme in **VB.net** and Object Oriented Programming (OOP) method.

The programme should do the following tasks.

User should be able to type Line of text in the text box.

When user clicks, "Display Length" button it should display Length of text in the text box next to the Display Length command Button.

When user clicks, "Get Word" button it should display first word from the line text which user entered in the text box next to the Get Word command Button.

(40 Marks)

(c)

- i) What is ActiveX control?

(10 Marks)

- ii) Write down the necessary steps and code to create the ActiveX button control that will pop a message box when the user will click on it.

(30 Marks)

Q3)

A library wants to automate its lending operations. An author can write several books. You are hired by the owner of the library to develop software in visual basic. The following information about the authors and books are required by the user. Name of the author, Address of the author and the books written by the author, price of each book and the date published.

(a) Derive the necessary database structure (database, tables, fields and relationships) to store the above information. (25 Marks)

(b) Prepare and draw an interface form in such a way that the user should be able to select the name of the author from Combo box and the Form should display the all the books written by the selected author in DBGrid. (20 Marks)

(c) Write the necessary event procedure to perform the above operations. (55 Marks)

Q4)

(a) What are the advantages of Rapid Application Development?

(b) Write down the important properties of

(a) Textbox control

(b) Label Control

and explain why you think they are important.

(c) Describe the role of the following parameters in Mouse Up and Mouse Down events:

Button as Integer

Shift as Integer

X as Single

Y as Single

(d) Explain why the following statement in Visual Basic 6.0 is illegal and show how you would make them legal.

```
strOurs=strMine+ "and" + 0
```

where strOurs and strMine are Strings

(e) Describe the difference between <Form>.Show and Load <Form> in Visual Basic 6.0 [For example, if the form is form1, the command syntax will be as follows:

```
Form1.Show
```

```
Load Form1 ]
```

State clearly what is meant by *Modal*.

Write down necessary code to open a form as a modal.

(5*20 Marks)