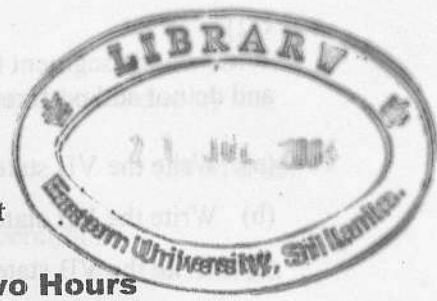


**Eastern University, Sri Lanka**  
**Third Examination in Science (2001/02)**  
**Repeat**  
**Second Semester (April/May 2004)**  
**OC 305 -Rapid Application Development**



**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) (i) Differentiate the three different styles of a combo box. **(20 Marks)**

(ii) Write down the necessary steps to connect Database using "ADO" & "DAO". **(20 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)

Write a code segment that performs the following tasks. Follow the precise directions and do not add prefixes to specified identifiers.

- (a) Write the VB statement to clear a text box named txtName1 and txtName2
- (b) Write the VB statement to reset the insertion point into a text box named txtName.
- (c) Write the VB statement to make a label named lblAnswer1 and lblAnswer2 become invisible.
- (d) Write the VB statement to assign the value contained in a label named lblAns to a text box named txtAns.
- (e) Use a With statement to clear a text box named txtAdv and txtSal and to reset the insertion point to the text box txtSal.
- (f) Write a statement that computes the average of variables named A, B, and C and stores the value in the variable named D.
- (g) Write a statement that formats a value to three positions past the decimal (thousandth's place).
- (h) Write a statement that uses the Val function to convert the string literal "4561" to a value and assign it to the Integer variable, intNum.
- (i) Write an If statement that add the value of 10 to the variable intSum if intNum is greater than 19. Otherwise, the If statement will add the value of 5 to intSum.
- (j) Write an If statement that assigns the string "hello" to the text box txtMessage if the value of intQuantity is less than 15 or greater than 44. The same If statement should also assign the string "goodbye" to txtMessage if the value of intQuantity is equal to 30.

(10 \* 10 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)

