END-TERM EXAMINATION
DECEMBER 2006

Exam Series code: 100274DEC06200274	
Paper Code : MCA-207	**Subject: Front End Design Tools**

Time: 3 Hours	**Maximum Marks: 60**

Note: Attempt all five questions.

Q. 1. Give short answers to following questions :-   **(10 x 2 =20)**
  (a) What is control array? Write steps to create control array of command buttons.
  (b) What do you mean by compile time error, run time error and logical errors? Explain with the help of suitable example.
  (c) Describe various built in data types in Visual Basic 6.0.
  (d) Discuss with suitable examples, various looping statements available in VB 6.0.
  (e) What are the different ActiveX EXE and ActiveX DLL?
  (f) What are differences between ADO and DAO?
  (g) What are benefits of table type recordset over Dynaset recordset? When we use table type recordset.
  (h) What are the differences between COM and DCOM?
  (i) How we create web pages in Visual Basic?
  (j) What is Common Dialog Box?

Q. 2. What is MDI? What is benefit of MDI application? Write a program for text editor by using MDI. Implement Open an existing file, Edit in existing file, save the file, cut copy paste, find and replace functionality by using menu bar.
                                                                (10)

Or

Write steps to add tool bars to a form. Write a program for Paint Brush using toolbar.   **(10)**

Q. 3. (a) What is different between subroutine and function in VB? Write a function to reverse a given string.   **(5)**

(b) What is cursor location? Discuss different types of cursor location.   **(5)**

Q. 4. What is ActiveX document? How can we create an ActiveX document in VB? Discuss with a suitable example.   **(10)**
Or
How do you create an ActiveX control? Write steps to create ActiveX control num textbox that accepts only numeric value.   **(10)**

Q. 5. (a) Define different types of module in Visual Basic. **(5)**

(b) Discuss different types of locking available in ADO with suitable examples.
(5)

Or

Write a Visual Basic program to create data entry form for STUDENT (RN, NAME, COURSE) table in Oracle by using ADO objects. **(10)**

END-TERM EXAMINATION

Third Semester [MCA] - DECEMBER 2005

Paper Code: MCA 207	Subject: Front-End Design Tools

Time: 3 Hours	(Batch 2004)	Maximum Marks: 60

Note: Attempt any five questions. All Question carry equal marks.

Q. 1. Fill in the blanks :-
   (a) An executables that can expose COM components is called ……………………..
   (b) The size of data type single and double is …………………….. and ………………… bytes respectively.
   (c) ………………., ……………… and ……………. container objects.
   (d) ………………., ………………, ……………. are the type of combo box.
   (e) OLE used for ……………………
   (f) …………………… is the control used to call a window application.
   (g) ……………………… property is used to count no. of items in a combo box.
   (h) ……………….. is a property to resize a label control according to your caption.
   (i) Timer control contains ………………….. no. of events.
   (j) …………………… is the difference between List Index and Tab Index.
   (k) ……………. collection in recordset used to assign a value from text box to table column without making a binding in data control.
   (l) ……………. property used to add a menus at runtime.

Q. 2. Explain :-
   (a) What is DSN?
   (b) What is DAO?
   (c) Difference between Dynaset and Snapshot?
   (d) Difference between Recordset and Querydef?
   (e) Difference between recordset and Resultsets?
   (f) What is OLE? Explain
   (g) What is DDE?
   (h) Explain Get, Let, Set Properties.
   (i) What are the uses of List view control?
   (j) What is the use of progress bar control?
   (k) What is the difference between ADO and other data access objects?
   (l) What is OLEDB?

Q. 3. (a) Write a program to calculate area and perimeter:-
   Operation
   - The user enters values for the length and width of a rectangle and clicks on the calculate button or presses the Enter key to activate the calculate button.

- The application then displays the area and perimeter of the rectangle in two labels.

Specification
- The formula for calculating the area : width * length.
- The formula for calculating the perimeter : 2* width + 2*length.
- The application should accept fractional decimal values like 10.5 and 20.65 for the user entries.

Assume that the user will enter valid numeric data for the length and width.

```
┌──────────────────────────────────────┐
│ Calculate Area & Perimeter    x        │
│                                        │
│ Length:    [              ]            │
│                                        │
│ Width:     [              ]            │
│                                        │
│ Area:      [              ]            │
│                                        │
│ Perimeter:[              ]             │
│                                        │
│        [ Calculate ]   [ Exit ]        │
│                                        │
└──────────────────────────────────────┘
```

(b) Write a program to convert Fahrenheit temperature to Celsius:-
Operation

- The user enters a number into the Fahrenheit text box and clicks the calculate button or presses the enter key to activate that button.
- The application calculates the Celsius equivalent and displays it in a label on the form.

Specification

- The formula for converting temperature from Fahrenheit to Celsius is (F-32) * 5/9.

Assume that the user will enter valid numeric data for the length and width.

```
┌──────────────────────────────────────┐
│ Calculate Celsius            X         │
│                                        │
│ Fahrenheit: [              ]           │
│                                        │
│ Celsius:    [              ]           │
│                                        │
│        [ Calculate ]   [ Exit ]        │
│                                        │
└──────────────────────────────────────┘
```

Q. 4. Write short notes on any four of the following :-
   (a) Form Lifetime
   (b)   API

    (c)   Multithreading in VB
    (d)   Class module
    (e)   DCOM

Q. 5. (a) Explain any three common dialog boxes along with its properties.
       (b) Write different error handling techniques in VB in details.

Q. 6. (a) Explain DS in general and different types of DSN in particular.
       (b) How many types of record sets are available in VB. Explain each? Write
       advantages and disadvantages of each type of record sets.

Q. 7. Differentiate between the following using examples:-
     (a) MDI and SDI application
     (b) Subroutines and Functions
     (c) DAO vs. RDO.

END-TERM EXAMINATION

Third Semester [MCA] - DECEMBER 2004

Paper Code: MCA 207	Subject: Front-End Design Tools

Time: 3 Hours	Maximum Marks: 60

Note: Attempt any five questions. All Question carry equal marks.

Q. 1. (a) Name Visual Basic's primary windows. Out of these which one is used as application's background?

(b) How does grid help us to align controls on the form?

(c) What are controls for? Write down three broad categories of controls in VB. Explain them briefly.

Q. 2. (a) How does an application respond to event when so many events can happen at any time?

(b) Differentiate between following:-
(c) Differentiate between following:-
     (i)   Picture box and Image box
     (ii)   List box and combo box
     (iii) Design Mode and Run Mode

(d) What is wrong with following variable definition?
     (i)   Dim height as integer.
     (ii)   Global x3=189
     (iii) Global constant flag as integer.

Q. 3. (a) Write a procedure to create a pop-up menu on a form.
(b) What is ADO? How is it differs from a simple data control?
(c) List and describe three specialized controls that use ADO to communicate with any database.

Q. 4. (a) Write down code for following :-
User wants to display following message as label's caption as soon as application starts.

"Today is working Day" if Current day is Monday, Tuesday, Wednesday, Thursday, or Friday.
Else "Today is Holiday"

(b) Write down single statement for each of the following: -
   (i) Check if the value of numeric variable I is greater than 15. If yes, then print "greater" in label's display.

   (ii) Assign the value returned from a function 'Input Box' to the integer variable 'User input' Function input box should display the message "Enter your input" and input box title bar should display "Data Input".

(c) What is scope of a variable? In how many ways variable scope can be defined. Explain giving example.

Q. 5. (a) What is difference among SDI and MDI? When MDI is preferred over SDI? Also name a third interface style which is becoming more popular over SDI and MDI.

(b) What is help file? How can we create a help file for any VB application? Write down complete steps.

(c) How can we access individual array element and control array elements?

Q. 6. (a) From where do the time and date function get their values? Describe the purpose of Timer () function. What is the most important property (which is to be set) where using timer () function.

(b) What is difference between Active X control and OLE control? Write down three controls names for each. How can an active X control be added to tool bar.

(c) What is Dynaset-type? Give its usage.

Q. 7. (a) User has created a "COMPANY" database in MS-Access. Now he wants to access it through VB. Write down complete steps to open his DB through VB.

(b) In how many ways user can retrieve data from a table and get is display on the form. Which important properties are to be set for accessing a table?

(c) What is COM/DCOM? How an external worksheet designed in MS-Excel may be accessed in VB environments?

Q. 8. (a) When a crystal report utility preferred over data report? Why?
   (b) Compute results for following statements:-
       (i)   Ans = int (-40.50)
       (ii)   Ans=int(40.50) (Ans is integer)
       (iii) Astr = Mid $ ("Examination",3,4) (aster is string)

(c) Write a procedure that asks the user for entering his birth date. If user enters valid date (if invalid keep on taking new values), then display a message box showing "Eligible for Voting" if his age is more than 17. If his age is more than 65 then display "Elder citizen" else display "Not eligible for voting".

(d) Define debugging? Which types of error are detected using debugging? What is the usage of immediate window?

END-TERM EXAMINATION
Third Semester [MCA] - DECEMBER 2003

Paper Code: MCA 205	Subject: Front-End Design Tools
Time: 3 Hours	Maximum Marks: 60

Note: Attempt five questions in all.

Q. 1. Answer the following: (**12**)
  (a) How can you enable the user to access a menu item from the keyboard?
  (b) What does the window list property do?
  (c) Which property procedure is used to retrieve the value of information from a class?
  (d) What is the call back procedure?
  (e) How do you create a method for a class?
  (f) What does the address of operator do?
  (g) What are the two methods you call to read and write properties from a property bag?
  (h) Give one example of the object browser over the properties windows?

Q. 2. (a) What is the function of timer control?   (**4**)

(b) What is multiple document interface? What is minimum requirement of MDI? Can you create a child form/window to MDI that goes outside the boundaries of the MDI window?   (**4**)

 (c) What is the key preview event? Explain its utility.   (**4**)

Q. 3. (a) What is the early bound and late bound object variable declaration? Explain how to access excel through object variable?   (**6**)

(b) Explain the syntax for setting up connection to a database through ADO. Explain the different parameters that allow you to pass information at connection time. Explain the concept of a ADO-ODBC bridge.   (**6**)

Q. 4. (a) Explain with example the two basic API drawing functions used to draw lines and circle.   (**3**)

(b) Explain how to customize the appearance of the form. Describe the value of the border style property.   (**3**)

(c) Explain what are the ODBC conformance levels? What is pass through SQL?   (**6**)

Q. 5. (a) What does auto redraw property means in image/picture box?   (**3**)

(b) What is Where clause in SQL, write a select query to select all fields form the authors table where the books publishing year is greater than 2000. (Assume and state an appropriate table structure).   (**3**)

(c) What type of errors an application should handle in the code to keep the application from crashing. And what is the VB error handling mechanism.   (**6**)

Q. 6. Generate output of the following codes:

(a)   (**3**)

```
dim x
x = ((5*9 + 13) / 14) * 2
print x
```

(b)   (**3**)

```
Dim x
Dim name as string
Name = "SHYAMALAM"
fname = name + "LAMHANI"
Print fname
```

(c)   (**3**)

```
dim ar(0) as integer.
Ar(0)=11 ar(1)=22 ar(2)=33 ar(3)=44 ar(4)=55
Redim Preserve ar(2)
What will be the value of ar(0), ar(1), ar(2), ar(3) ?
```

(d)   Mystring="Visual Basic is Fun"   (**3**)
```
Leftstring=left(mystring,3)
Print leftstring
```

Q. 7. (a) Explain the concept of dynamic array in VB.   (**4**)
(b) Explain the functionality of send keys with an example.   (**4**)
(c) Distinguish between a record set opened as dynaset, snapshot and a table.(**4**)

Q. 8. Write short notes on any two:-   (**12**)
(a) Active X data objects   (b) OLE Control
(c) Window Management   (d) Encapsulation

END-TERM EXAMINATION

Third Semester [MCA] – JANUARY 2001

Paper Code: MCA 205   **Subject: Front-End Design Tools**

Time: 3 Hours   **Maximum Marks: 60**

Note: Attempt any six questions including Q. No. 1 which is compulsory.

Q. 1. (a) Which statement terminates a program execution in VB?   **(1)**
(b) Which function is used to execute an executable program from within a VB application. Give syntax and usage.   **(2)**
(c) What is the syntax and usage of the send keys statement in VB?   **(2)**
(d) Give the syntax of the select case statement in VB.   **(1)**
(e) Give the VB equivalent function for the following windows API function.
    (i) HWND Get Top Window (HWND hwnd);   **(2)**
    (ii) Void close window (HWND hwnd);
(f) Differentiate between LTRIM, RTRIM, TRIM function of VB.   **(3)**
(g) What is the size of a variant data type in bytes.   **(1)**
(h) How can a picture be assigned to the form (background) at run time in VB.   **(2)**
(i) Explain the syntax of Oracle's SELECT Statement.   **(3)**
(j) Differentiate between a class module, a code module and a form module in VB.   **(3)**

Q. 2. (a) Suppose two application windows are open on the desktop with the title bar caption "FirstApp" and SecondApp" respectively. The application with "FirstApp" as the title bar caption is active. Write a code segment for making the second application active from this application.   **(4)**

(b) What are the following (Give examples)   **(3)**
    (i) Public and private procedure
    (ii) ReDim Statement

(c) What are the different storage classes in VB? Explain.   **(3)**

Q. 3. (a) What is the value of a variable I after the execution of the following segment of code? If there is a compile time/ runtime error please confirm.   **(3)**
```
Dim I as integer
Dim S as String
I=2
S="1,234"
I = I * S
```

(b) Write a procedure in VB that takes a form as its first parameter and a string as its second parameter. The procedure should print the string centered on the form. **(7)**

Q. 4. (a) Explain the error handling mechanism of VB. **(5)**

(b) Explain the DCOM architecture. **(5)**

Q. 5. (a) Explain the architecture of RDO. **(6)**

(b) What are the different ODBC conformance levels? Explain. **(4)**

Q. 6. (a) Explain how you incorporate context sensitive help in a VB application. **(4)**

(b) Explain how a procedure is written in Oracle with example. Also explain how a stored procedure of Oracle is used VB. **(6)**

Q. 7. (a) Explain what are triggers and cursors in context of Oracle. What types of triggers are generally associated with master details relationship? **(4)**

(b) Write the ADO connection string for connecting to a Oracle database. **(2)**

(c) Explain the transaction management technique of DAO. **(4)**

Q. 8. Write short notes on any two of the following **(10)**
(a) File Management in VB
(b) Microsoft Transaction server
(c) Developer 2000 vis—vis Visual Basic
(d) Visual Source Safe