



UNIVERSITY OF COLOMBO, SRI LANKA

**UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING**

(Successor to the Institute of Computer Technology (ICT), University of Colombo)

**DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)**

***Academic Year 2003/2004 – 2<sup>nd</sup> Year Examination – Semester 4***

***IT4201: Rapid Application Development***

***PART 1 – Multiple Choice Question Paper***

**24<sup>th</sup> July, 2004**

***(ONE AND HALF HOURS)***

**Important Instructions:**

- The duration of the paper is  $1\frac{1}{2}$  **(one and half) hours**.
- The medium of instruction and questions is English.
- The paper has 35 questions and 8 pages.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from -1 (*All the incorrect choices are marked & no correct choices marked*) to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
- Note that questions appear on both sides of the paper.  
If a page is not printed, please inform the supervisor immediately.
- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**



1) Which of the following array declarations in Visual Basic is/are correct?

- |   |  |
|---|--|
| (a) Public empNames(10) As String       | (b) Dim empSalary() As Integer           |
| (c) ReDim empBonus (intSize) As Boolean | (d) Public skillTypes (1 To 5) As String |
| (e) Dim empDetails(4,5) As Variant      |  |

2) Option Base statement in general declaration section is used to

- |   |   |
|---|---|
| (a) change the default lower bound of an array. | (b) change the upper bound of an array. |
| (c) change the data type of an array.           | (d) change the size of a variable.      |
| (e) change the scope of a variable.             |   |

3) Consider the following declaration:

Dim A1, A2, A3

What is the data type of A1?

- |                  |            |             |
|------------------|------------|-------------|
| (a) Integer      | (b) String | (c) Variant |
| (d) User defined | (e) Real   |             |

4) Select the correct statement(s) from among the following which are related to different modules in Visual Basic.

- |   |
|---|
| (a) A standard module contains code that is shared by several forms.  |
| (b) A standard module has the .bas extension.                         |
| (c) <i>Form</i> modules can contain general procedures.               |
| (d) The code in standard module is private by default.                |
| (e) Each <i>form</i> in an application has an associated form module. |

5) One wants a *form* to be loaded into the memory without directly displaying it. Which of the following would accomplish it?

- |          |            |         |
|----------|------------|---------|
| (a) Load | (b) Unload | (c) Dim |
| (d) Show | (e) ReDim  |         |

6) Consider the following statements:

- (i). One can specify that a menu control will be a separator bar by supplying a space (" ") as the Caption property.
- (ii). A menu control array is created during design time by setting the Index property of a menu item to 0.
- (iii). If one wants to create a menu option named "File " where the access key combination is "Alt" + "F", the caption should read as F&ile.

Which of the above statements is/are correct in relates to menus in Visual Basic.

- |                         |                         |         |
|-------------------------|-------------------------|---------|
| (a) (ii) only.          | (b) (i) and (ii) only   | (c) All |
| (d) (ii) and (iii) only | (e) (i) and (iii) only. |         |



7) If an error occurs in a procedure after the statement On Error Go To 0, then

- (a) the error handling routine at the label 0 executes.
- (b) the generic VB error handling routine processes the error.
- (c) execution continues at the line following the error.
- (d) execution will continue in the error handling code.
- (e) error handling is disabled.

8) Which of the following commands in Visual Basic removes a *form* from the screen view but keep it in memory?

- |          |          |            |
|----------|----------|------------|
| (a) Show | (b) Load | (c) Unload |
| (d) Dim  | (e) Hide |            |

9) Consider the following code segment:

```
Text1.SetFocus  
Text1.SelStart = 0  
Text1.SelLength = Len(Text1.Text)  
Text1.SelText = "Hello"
```

The above code segment in Visual Basic

- (a) replaces the text in the Text1 with "Hello".
- (b) will have the text "Hello" inserted at the beginning of Text1.
- (c) replaces 5 characters in the Text1 with "Hello".
- (d) will give 5 as the output.
- (e) will have the text Hello inserted at the end of Text1.

10) Consider the following statement:

```
frmForm1.Show vbModal
```

Which of the following is /are true?

- (a) frmForm1 does not allow the user to interact with other forms in the application at the same time.
- (b) it allows the user to switch to another form or dialog box.
- (c) it is the same as frmForm1.Show Modal 1.
- (d) it does not display frmForm1 even if the form is loaded in to the memory.
- (e) the statement will give an error.

11) Consider the following statements:

- (i). ByRef indicates that argument is passed by reference
- (ii). ByVal is the default in passing arguments in Visual Basic 6
- (iii). Protected is an access specifier in Visual Basic 6

Which of the following statements is/are true in relation to the above statements?

- |                           |                                      |                                    |
|---------------------------|--------------------------------------|------------------------------------|
| (a) Only (i) is correct.  | (b) All are correct.                 | (c) Only (i) and (ii) are correct. |
| (d) Only (ii) is correct. | (e) Only (ii) and (iii) are correct. |                                    |



12) Consider the following statements

- (i). DAO stands for Data Access Objects
- (ii). DAO s are suited for connecting SQL server better than RDO
- (iii). RDO s stands for Remote Data Access Objects

Identify the correct statement(s) from among the above.

- |                       |               |                         |
|-----------------------|---------------|-------------------------|
| (a) Only (i)          | (b) All       | (c) Only (ii) and (iii) |
| (d) Only (i) and (ii) | (e) Only (ii) |                         |

13) Consider the following four code statements and the incomplete code statement(s):

```
Dim mydb as Database -----(1)
Dim rst as recordset -----(2)
Dim strLastName as string ----(3)
Dim datPubDate as Date -----(4)
Set mydb = OpenDatabase (myPath) ----(5)
Set rst = mydb.OpenRecordset("Select * from Authors Pub_Date_____") -----(6)
```

If one is to use variable datPubDate and attribute Pub\_Date, identify the correct Select statement from following the below five statements for line 6?

- |   |
|---|
| (a) "Select * From Authors where Pub_Date = " & datPubDate        |
| (b) "Select * From Authors where Pub_Date = " & datPubDate & ""   |
| (c) "Select * From Authors where Pub_Date = #" & datPubDate & "#" |
| (d) "Select * from Authors where Pub_Date = datPubDate"           |
| (e) "Select * from Authors where Pub_Date=&datPubDate & "         |

14) Consider the following sequences:

- (i). Dynamic, Check, Static, Forward-Only
- (ii). Dynamic, Keyset, Static, Round-only
- (iii). Open, Keyset, Static, Forward-Only
- (iv). Dynamic, Keyset, Static, Forward-Only

Which of the above will be correct for ADOs?

- |               |               |                |
|---------------|---------------|----------------|
| (a) Only (i)  | (b) Only (ii) | (c) Only (iii) |
| (d) Only (iv) | (e) None      |                |

15) Consider the following statements:

Identify the correct statement(s) any of the following.

- (i). Dynamic Cursors allow one to view additions, changes and deletions by other users.
- (ii). Dynamic Cursors allow all types of movement through the Recordsets that do not rely on bookmarks.
- (iii). Keyset Cursors always support bookmarks and therefore allow all types of movement through the Recordsets.

Which of the above statements is/are correct?

- |                   |          |           |
|-------------------|----------|-----------|
| (a) (i)           | (b) (ii) | (c) (iii) |
| (d) (i) and (iii) | (e) All  |           |



16) An interface is a set of

- |              |                       |                             |
|--------------|-----------------------|-----------------------------|
| (a) Classes. | (b) Forms.            | (c) Properties and methods. |
| (d) Modules. | (e) Event procedures. |                             |

17) Consider the following declaration, initialisations and three statements respectively:

```
Dim MyTime, MyDate, MyStr  
MyTime = #17:04:23#  
MyDate = #January 27, 1993#
```

- (i). MyStr = **Format**(MyTime, "h:m:s") ' Returns "17:4:23".
- (ii). MyStr = **Format**(MyTime, "h:m:s") ' Returns "05:4:23".
- (iii). MyStr = **Format**(MyTime, "hh:mm:ss AMPM") ' Returns "05:04:23 PM".

Which of the above statements is/are correct?

- |                         |                       |                        |
|-------------------------|-----------------------|------------------------|
| (a) Only (i)            | (b) Only (i) and (ii) | (c) Only (i) and (iii) |
| (d) Only (ii) and (iii) | (e) All               |                        |

18) Consider the following the three statements is VB 6:

- (i). MyStr = **Format**(5, "0.00%") ' Returns "000.00%".
- (ii). MyStr = **Format**("HELLO", "<") ' Returns "HELLO".
- (iii). MyStr = **Format**("This is it", ">") ' Returns "THIS IS IT".

Which of the above statements is/are correct?

- |                |                       |                        |
|----------------|-----------------------|------------------------|
| (a) Only (i)   | (b) Only (i) and (ii) | (c) Only (i) and (iii) |
| (d) Only (iii) | (e) All               |                        |

19) Consider the following code segment and the three statement in VB 6

```
Dim strMyVariable as String * 8  
strMyVariable = "Elephant is a name of a mammal"  
Debug.print strMyVariable
```

- (i). "Elephant is" is printed on immediate window
- (ii). strMyVariable is an integer data type
- (iii). strMyVariable is string data type and can store only upto eight characters

Which of the above statements is/are correct?

- |              |               |                |
|--------------|---------------|----------------|
| (a) Only (i) | (b) Only (ii) | (c) Only (iii) |
| (d) All      | (e) None      |                |

20) An Erase statement

- |  |
|--|
| (a) in arrays Behaves the same way reception of whether the array is fixed or dynamic. |
| (b) in a Fixed size array releases storage spaces.                                     |
| (c) in Dynamic Arrays reinitializes elements of the array.                             |
| (d) in a fixed String array sets each element to zero.                                 |
| (e) in a user defined type sets each element to Zero.                                  |



21) Consider the following statements related to Error Handling in Visual Basic 6.

- (i). Error Trap is disabled when *On Error* statement is executed.
- (ii). More than one Error trap can be enabled at one time in Procedure.
- (iii). Error trap can be disabled by *On Error goto 0*.

Which of the above statements is/are correct?

- |                       |               |                |
|-----------------------|---------------|----------------|
| (a) Only (i)          | (b) Only (ii) | (c) Only (iii) |
| (d) Only (i) and (ii) | (e) All       |                |

22) Consider the following three statement:

- (i). *Err* objects in Visual Basic 6 are intrinsic objects
- (ii). *Err* objects in Visual Basic 6 have global scope
- (iii). *Err* objects in Visual Basic 6 have methods and properties

Which of the above statements is/are correct?

- |                        |               |                |
|------------------------|---------------|----------------|
| (a) Only (i)           | (b) Only (ii) | (c) Only (iii) |
| (d) Only (i) and (iii) | (e) All       |                |

23) Consider the following array declaration and the three statements given thereafter.

Dim x(10,4 to 6) as String

- (i). x is a Multi-dimensional Array and the First Dimension has 10 elements starting the first element from 0 to 9 which the second dimension has three elements.
- (ii). x is a two Dimensional Array and the First Dimension has eleven elements starting first element from 0 to 10 which the second dimension has three elements.
- (iii). Option Base 1 in the General Declaration Section will force the First Dimension to begin from 1.

Which of the above statements is/are correct?

- |                        |               |                         |
|------------------------|---------------|-------------------------|
| (a) Only (i)           | (b) Only (ii) | (c) Only (ii) and (iii) |
| (d) Only (i) and (iii) | (e) All       |                         |

24) Consider the following statements:

- (i). Collections can be used in stead of arrays.
- (ii). In Collections when compared with arrays, elements only begin with 0.
- (iii). Collections can be influenced by Option Base 1.

which of the above statements is/are true

- |                        |                       |                         |
|------------------------|-----------------------|-------------------------|
| (a) Only (i)           | (b) Only (i) and (ii) | (c) Only (ii) and (iii) |
| (d) Only (i) and (iii) | (e) All               |                         |

25) Visual Basic 6 has/is

- |   |   |
|---|---|
| (a) a multiple inheritance supporting language. | (b) a single inheritance supporting language. |
| (c) an object based language.                   | (d) no classes.                               |
| (e) no constructors or destructors.             |   |



26) Consider the following three statement:

- (i). A collection object stores each item as user defined data type.
- (ii). A collection object stores in variant and it takes up 16 bytes.
- (iii). A collection is more efficient than an array.

Which of the above statements is/are true for Collections/Collection object?

- |                        |               |                |
|------------------------|---------------|----------------|
| (a) Only (i)           | (b) Only (ii) | (c) Only (iii) |
| (d) Only (i) and (iii) | (e) All       |                |

27) Which of the statements is/are correct from among the following:

- |  |
|--|
| (a) Public variables can be declared in procedures.  |
| (b) Private variables are private to the procedure they appear in.                             |
| (c) Private variables are private to the module they appear in.                                |
| (d) Static variables can be only declared in modules.  |
| (e) Values stored in static variables exist during the entire time the application is running. |

28) Consider the following three statement:

- (i). The two ways in which the variables can be declared in VB6 are implicit and explicit.
- (ii). In Explicit declaration of variable in the General Declaration of any module, Option Explicit should be placed.
- (iii). Implicit declaration is the best way of declaring variables in VB6.

Which of the among statement is /are correct?

- |                        |                       |                         |
|------------------------|-----------------------|-------------------------|
| (a) Only (i)           | (b) Only (i) and (ii) | (c) Only (ii) and (iii) |
| (d) Only (i) and (iii) | (e) All               |                         |

29) RAD comprises the following phases:

- |  |
|--|
| (a) Business modeling, Data modeling, Check modeling, Process modeling, Testing and Turnover.        |
| (b) Business modeling, Prototype building, Check modeling, Process modeling, Testing and turn over   |
| (c) Business modeling, Data modeling, Process modeling, Testing and turn over, maintenance           |
| (d) Business modeling, Data modeling, Process modeling, Application generation, Testing and turnover |
| (e) Data modeling, Data checking, Process modeling, Application generation, Testing and turnover.    |

30) Consider the following three statements related to RAD:

- (i). It is a high speed adaptation of a linear Sequential Software development model.
- (ii). It is very similar to a Proto type model.
- (iii). Using RAD, Software can be developed within a very short span like 60 to 90 days.

Which of the above statements is /are correct?

- |                         |                       |                        |
|-------------------------|-----------------------|------------------------|
| (a) Only (i)            | (b) Only (i) and (ii) | (c) Only (i) and (iii) |
| (d) Only (ii) and (iii) | (e) All               |                        |



31) Visual Basic 6 implements Polymorphism through

- |                                      |                            |                         |
|--------------------------------------|----------------------------|-------------------------|
| (a) Multiple-inheritance.            | (b) Interface-inheritance. | (c) Single inheritance. |
| (d) the utilization of form classes. | (e) General Modules.       |                         |

32) Consider the following statements:

- (i). RAD uses component based construction.
- (ii). ActiveX are Microsoft components; Java equivalents of ActiveX are JAVA BEANS.
- (iii). DCOM/COM are Microsoft Technologies for Building components.

Which of the above statements is/are correct?

- |               |                       |                         |
|---------------|-----------------------|-------------------------|
| (a) Only (i)  | (b) Only (i) and (ii) | (c) Only (ii) and (iii) |
| (d) Only (ii) | (e) All               |                         |

33) The following statements are related to deployment of Visual Basic 6 applications. Identify the correct statement(s).

- |  |
|--|
| (a) Deployment is best done by using a Third party tool.   |
| (b) For the web, application is posted to the Web server using the Package And deployment wizard.  |
| (c) For the Standard Application it is done through Multiple .cab files or a single cab file which will fit into a single floppy by Package and Deployment Wizard. |
| (d) Deployment can be done by application to many computers.   |
| (e) File instructions are stored in the .inf files for deployment.   |

34) Consider the following statements:

- (i). An ActiveX is a unit of executable code .exe,.dll and .ocx.
- (ii). OCX are 32 bit and 16 bit whereas VBX s are 16bit.
- (iii). ActiveX object are c based upon Structured Programming.

Which of the above statements is/are correct?

- |                         |                                   |                                    |
|-------------------------|-----------------------------------|------------------------------------|
| (a) Only (i) is Correct | (b) Only (i) and (ii) are Correct | (c) Only (i) and (iii) are correct |
| (d) Only (ii) and (iii) | (e) All is correct                |                                    |

35) Consider the following code segment:

```
Dim MyForm as new Form1
MyForm.show
```

Identify the correct statement(s) from among the following.

- |  |
|--|
| (a) MyForm is an ordinary Form object.   |
| (b) Show method only loads up the MyForm into memory.  |
| (c) New creates an instance to Form1 class at run form and by doing so produces as many copies of Form1 when ever the above code runs. |
| (d) The above code segment could be rewritten as:<br>Dim MyForm as Form1<br>Set MyForm = new Form1                                     |
| (e) Form1 is a method.   |

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