EASTERN UNIVERSITY, SRI LANKA
DEPARTMENT OF MATHEMATICS
SECOND EXAMINATION IN SCIENCE – 2010/2011
FIRST SEMESTER (April, 2013)
OC 207- RAPID APPLICATION DEVELOPMENT
(Proper & Repeat)

Answer all questions   **Time: 2 Hours**

Q1.

a) State clearly what is meant by Rapid Application Development (RAD).

b) Briefly describe the advantages and disadvantages of RAD.

c) Draw a flow diagram to depict the RAD life cycle, and briefly describe its stages.

d) RAD has many core elements that make it a unique methodology. Describe the

    following three elements:

    i.   Prototyping

    ii.   Iterative development

    iii. Time boxing

Q2.

a) State clearly what is Visual Basic?

b) State any four important features of Visual Basic.

c) State the programs that you can create with Visual Basic.

d) What is the purpose of the *Caption property* of the Command button in Visual

    Basic?

e) Briefly describe the differences between an *option button* and a *check box* control in Visual Basic.

f) What is a purpose of *image control* in Visual Basic and how can it be created?

g) What is *run time error* in Visual Basic, when does it occur, and what might cause it?

Q3.

a) Give the syntax of the following looping in Visual Basic and, describe the differences between them.

    i)   **For – Next Loop**

    ii)   **Do/Loop**

b) Describe at least three types of common dialog boxes in Visual Basic.

c) Describe the two basic built-in functions of Visual Basic.

d) State the purpose of the following formatting functions in Visual Basic and give the syntax for each.

    i)   Tab

    ii)   Space

    iii)   Format

e) What will be the output of the following program?

```
Private Sub Command_click ()

Dim X, g, n, sum As Integer

n = 8

X = 0

Y = 1

Print X
```

```
Print Y

    For I = 3 To n

        sum = X + Y

        Print sum

        X = Y

        Y = sum

    Next i

End Sub
```

f) Find the errors in the following VB program and underline them. Then, Correct and rewrite the entire program again:

```
Private Sub Command1_Click ()

    Dim  N  in  Integer

    N  is  7

    For  I  equal  2  to  N - 1

        If  N  Mod  I  =  0  Then

            Print "THE NUMBER IS NOT A PRIME NUMBER"

            Exit Sub

        If End

    Next  b

    Print "THE NUMBER IS A PRIME NUMBER"

End Sub
```

Q4.

a) State the differences between a *Visual Basic project file* and a *data file*.

b) State what is *SQL*, and how is it used in Visual Basic.

c) Give the syntax for one and two dimensional arrays of Visual Basic.

d) Describe what **ADO** (*ActiveX Data Objects*) is, and give the **ADO** objects.

e) Define the terms **COM** (*Component Object Model*) and **DCOM** (*Distributed Component Object Model*).)

f) Describe the elements of **ActiveX**.

g) Briefly describe **Visual Basic Extension (VBX)** and **OLE Controls (OCXs)**.