EASTERN UNIVERSITY, SRI LANKA
DEPARTMENT OF MATHEMATICS
SECOND YEAR EXAMINATION IN SCIENCE - 2012/2013
FIRST SEMESTER (Mar. /Apr., 2016)
OC 207 – RAPID APPLICATION DEVELOPMENT
(PROPER & REPEAT)

r all questions **Time allowed: 02 hours**

we provide a service or create a product we always follow a sequence of steps to plish a set of tasks.

Explain the basic pattern of general life cycle models in software development.

Distinguish between sequential software development and iterative software development.

Discuss the main disadvantages in traditional software development. Take any two traditional software development methods to support your answer.

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

Discuss the role of code generators to take advantage of powerful development software using Rapid Application Development (RAD).

D model the functional modules are developed in parallel as prototypes and are integrated e the complete product.

Write down the three most important RAD management techniques.

Discuss the requirements of RAD model.

Explain the RAD environment tools with the aid of a diagram.

Discuss in detail the pros and cons of RAD model.

Explain how you can create application software using RAD method. (Use an appropriate example to support your answer: a prototype example)

03. From a programming viewpoint, Visual Basic (VB) is an object-oriented that consists of t fundamental parts: a visual part and a language part.

a) List down the general features of VB.

b) In programming part, frameworks did all the work behind the scenes serving as an interface between the program and the operating system. Discuss the main two par .NET framework.

c) Describe briefly the general structure of an event procedure with a suitable exampl

d) Explain briefly the following toolbox controls, by stating their important propertie their uses.

i. CheckBox
ii. ListBox
iii. Timer
iv. TabControl

e) Give the syntax of the following decision structures in VB .Net and write an appro example for each of them.

i. If...Then...ElseIf... Else
ii. Select Case

04. You can accomplish "looping" in one of two ways: by executing a block of statements a fi number of times or by executing the block repeatedly until a specified condition is met.

a) Find the output of following vb.net code fragment:

```
Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.
    Dim count, sum As Integer
    sum = 1000
    For count = 100 To 10 Step -10
        sum -= count
        ListBox1.Items.Add(sum)
    Next

End Sub
```

b) Consider the following piece of code in vb.net:

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    Dim m, n As Integer
    Do
        n += 1
        m += n
        ListBox1.Items.Add(n & vbTab & m)

        If n = 10 Then
            Exit Do
        End If
    Loop
End Sub
```

Change and rewrite this piece of code using ***Do...Until*** Loop to get the same output.

c) Write a program in vb.net to sort three numbers using arrays. You can create an interface to support your answer.

d) Discuss the benefits of ***ADO.net (ActiveX Data Objects .net)*** in VB.net.