# EASTERN UNIVERSITY, SRI LANKA DEPARTMENT OF MATHEMATICS SECOND EXAMINATION IN SCIENCE - 2011/2012 FIRST SEMESTER (April / May, 2015) OC 207 - RAPID APPLICATION DEVELOPMENT (Proper \& Repeat) 

Time: 2 Hours
Q1.
a) RAD has many core elements that make it a unique methodology. Describe the following three elements:
i. Iterative development;
ii. Team members;
iii. Time boxing.
b) Describe the RAD life cycle with the aid of a flow diagram.
c) Briefly describe the advantages and disadvantages of RAD.
a) Briefly explain how you can make groups of option buttons in Visual Basic.
b) State the effect of a Dim statement on the variables declared in Visual Basic.
c) Describe the three type of errors; syntactic, semantic and logical error with suitable examples.
d) List the ADO objects (ActiveX Data Objects) and explain them.
e) State the differences between a Visual Basic project file and a data file.

Q3.
a) What is meant by objects and properties in Visual Basic? How are they related to each other?
b) State the purpose of the following suffixes for literals in Visual Basic with suitable example.
i) \&
ii) !
iii) \#
iv) @
c) Write the syntax for variable and constant declaration in Visual Basic, and describe the differences between them with examples.
d) Briefly describe the following basic built-in functions of Visual Basic:
i) MsgBox () Function;
ii) InputBox () function.
e) What is Visual Basic Event? Give three examples of events.

Q4.
a) What will be the output of the following Visual Basic program?

Private Sub Command_click ()
Dim s As String
$\mathrm{s}=$ "Visual Basic"
$\mathrm{n}=\operatorname{Len}(\mathrm{s})$
Do
Print Right (s, n)
$\mathrm{n}=\mathrm{n}-1$
Loop While $\mathrm{n}>0$
End Sub
b) Find the errors in the following VB program and underline them. Then, correct and rewrite the entire program again:

Sub Fibonacci (S1 as NUMBER, S2 as INTEGER, N as String)
Output S1, S2
Dim count as Integer, dim term as Float
For count EQUAL 3 TO N
Term $=\mathrm{S} 1+\mathrm{S} 2$
Print term
$\mathrm{S} 1=\mathrm{S} 2$
$\mathrm{S} 2=\mathrm{S} 1$
Next value
End sub
c) State the advantages and disadvantages of ActiveX Controls.
d) Describe the elements of ActiveX Controls.
e) Briefly describe Visual Basic Extension (VBX) and OLE Controls (OCXs).

