B3.5-R4: VISUAL PROGRAMMING

NOTE:

> 1. **Answer question 1 and any FOUR from questions 2 to 7.**
> 2. **Parts of the same question should be answered together and in the same sequence.**

Time: 3 Hours   **Total Marks: 100**

1.
a)   Explain the process of managed execution in .NET environment.

b)   What are the advantages of using ADO.NET over the classic ADO?

c)   Explain the various types of access modifiers and the restrictions on the use of each in the context of visual programming.

d)   Explain the data types that are supported by VB.NET.

e)   Explain the inheritance.

f)   Explain the types of server control events and sequencing by associating each with specific server controls.

g)   Explain the web server controls that have been specifically meant to be used with data sources.

(7x4)

2.
a)   What do you understand by Datasets? How do they differ from RecordSets or DataReaders?

b)   What do you understand by Structured Exception Handling? Explain five key words that are commonly used in Exception handling.

c)   Give the difference between cookies, sessions and application objects of ASP.NET.

(6+6+6)

3.
a)   Write appropriate event oriented procedures for a VB.NET form **frmMovies** that contains Command Buttons: **cmdAdd** and **cmdRemove**. Besides it also contains List box: **lstMovies** and also a text box: **txtMovie**. Initially, the form at run time displays five movies of your choice. Another movie can be added to this list through text box and by clicking at a command button **cmdAdd** and a selected movie of the list box can be removed by clicking a command button **cmdRemove**.

b)   Differentiate between Console Applications and windows applications. When is it appropriate to use console applications?

(9+9)

4.
a)   Write a series of event oriented procedure in VB.NET to generate and display seven days of week corresponding to dates that begin with 15-Dec-11 in a list control, **List1** that is contained by a form, **Form1**. The **List1** should display date and day of the week, duly separated by a space.

b)   Describe the components of .NET data Provider along with their functionality.

(9+9)

5.

a) Describe the effect of executing the following Six statement Sets of Statements:

   i) txtBox.Text="Hello"
   Clipboard.SetDataObject(txtBox.SelectedText)

   ii) Dim randomNum As New Random()
   txtBox.Text=chr(randomNum.Next(32,127))

   iii) Dim randomNum As New Random()
   Dim suit() As String={"","Hearts","clubs","Diamomds","Spades"}
   Dim denomination () As String={"","2","3","4","5","6", _
       "7","8","9","10","Jack","Queen","King","Ace"}
   txtBox.Text=demonination(randomNum.Next(1,14)) & " of " & _
       suit(randomNum.Next(1,5))

b) Determine the output produced by each set of lines (of code) given below:

   i) Dim allVowelWords(), line As String
   Line="abstemious,dialogue,facetious,sequoia,education"
   allvowelWords = line.Split(","c)
   txtOutput.Text=allVowelWords(2)

   ii) Dim orderWords() As String   ' Letters in alphabetical order
   Dim line As String = "bijoux,biopsy,almost"
   orderWords = line.Split(","c)
   txtOutput.Text=orderWords(orderWords.GetUpperBound(0)).Trim

   iii) Dim notes() As String={"A","B","C","D","E","F","G"}
   txtOutput.Text=Join(notes, ","c)

c) Describe the distinct features of Web Site administration Tool.

(6+6+6)

6.

a) What do you understand by Overloading, Overriding and Shadowing? Explain the modifiers that are used to control properties and method of overridden.

b) What is meant by Visual inheritance? How is this concept useful in Visual Basic.NET programming? Explain with the help of suitable example.

(8+10)

7.

a) What specific tasks are performed by ASP.NET configuration system? Explain.

b) Write short notes on the followings:

   i) Rich Server Controls
   ii) Inheritance modifiers
   iii) Default Constructor

(6+[4x3])