

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 type of Assemblies that are available in .NET environment.
 - b) Explain the commonly used structured exceptional handling blocks in VB.NET programming.
 - c) How can you prevent users of an application from editing the text in the ComboBox controls in .NET?
 - d) What do you understand by GDI? Explain the distinct features of GDI plus.
 - e) What do you understand by Repeater Control? Explain the type of template that is used for repeater control.
 - f) Explain the process that is used by ASP.Net to store the Session data in SQL server.
 - g) Explain the advantages of the code-behind feature of ASP.net

(7x4)

2.
 - a) What are major differences between classic ADO and ADO.NET? Explain the two fundamental objects in ADO.NET?
 - b) What do you understand by State Management? How many ways are there to maintain a state in .NET?
 - c) Explain with suitable examples the basic features of object oriented programming using VB.Net.

(6+6+6)

3.
 - a) In a factory, the casual workers are paid wages according to the following wage Plan:

Number of Hours worked in a Month	Category of workers	
	Skilled	Unskilled
Up to 150	Rs.50	Rs.30
Next up to 180	Rs.60	Rs.35
Thereafter	Rs.75	Rs.45

Besides above, the wages include a daily allowance of Rs.30 per day for skilled workers and Rs.20 per day for unskilled workers.

Using an appropriate user interface, you are required to write a program in VB.Net, which consists of necessary event procedures that accept the number of hours worked as input from a text control, **txtHours**, numbers of days worked as input from a text control, **txtDays** and checks an option button **optSkill** or **optNoSkill** to select (**Skilled or Unskilled**) worker type. On clicking a command button **cmdWages**, the a amount of wages payable to a worker is calculated according to above wage plan and displayed in another text box **txtWages**.

- b) Write a Function called HCM that accepts as input two arguments as integer values and returns the output as Highest Common Multiple (HCM) of these input arguments.

(9+9)

- 4.
- A computer dealer offers two basic computers: the Delux Model at Rs.20,000 and Super Model at Rs. 25,000. The customer can order any of the following options: multimedia kit at Rs. 4,500, Internal Modem at Rs.1,200 and additional 2 GB RAM at Rs.3,000. Using an appropriate user interface, write a program in VB.Net that computes the cost of the computer system selected.
 - What do you understand by abstract classes? Explain the distinct characteristics of an abstract class.
 - Explain the types of server control events and sequencing by associating each with specific server controls.

(6+6+6)

- 5.
- Explain the difference between a HyperLink control and a LinkButton Control while using ASP.Net?
 - Identify and explain the errors, if any:

```

Dim a(3,4) As Integer
Private Sub btnDisplay_Click (...) Handles btnDisplay.click
    'Fill an array
    Dim J As Integer, K As Integer
    Dim sr As IO.StreamReader=IO.File.OpenText("DATA.TXT")
    For J=1 To 4
        For K= 1 To 3
            A(J,K) = CInt(sr.ReadLine)
        Next
    Next
    sr.Close
End Sub

```

(Assume that the 12 lines of the file DATA.TXT contain the following entries:

1,2,3,4,5,6,7,8,9,0,1,2)

- List out the steps to create a master page and the use of the master page?
- Explain the differences between Windows forms and classic VB Ruby form in respect of event firing and application lifetime.

(3+3+6+6)

- 6.
- Explain with example the concept of overloading. How is method overriding different from method overloading?
 - How can you identify whether or not any changes are made to the DataSet object since it was last loaded?
 - What is the difference between object, class and a structure? Explain the similarities and dissimilarities between a class and a structure.

(6+6+6)

- 7.
- Explain important Web server controls in ASP.NET?
 - Write short notes on the following:
 - Typed DataSets
 - Visual Inheritance
 - Parameterized Constructor

(6+[4x3])