ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD
(Department of Computer Science)

Course: Visual Basic & Database Interface (3435) **Semester: Autumn, 2012**
Level: PGD (CS) **Total Marks: 100**

ASSIGNMENT No. 1

Note: All questions are compulsory and carry equal marks.

Q. 1 (a) Write down the complete history of Visual Basic in Tabular form, also do its comparison with other languages.

(b) List and explain the functions of various windows that are displayed when the Visual Basic application gets loaded in the design mode.

Q. 2 (a) Explain at least five features of Integrated Development Environment (IDE) of Visual Basic.

(b) Explain all the steps that are involved in Creating, Saving and Running a simple Project in VB.

Q. 3 (a) Write the steps to be followed to add any object from the tool box to any application.

(b) Explain different file controls add and also mention their use on the form.

(c) Discuss the various properties for Labels with examples.

Q. 4 (a) Explain the different types of variables used in VB with example.

(b) Explain the following:
(i) Picture box (ii) Printer object

(c) Write a VB program that prompts the user to input marks of four (04) subjects, then calculates the summation and the average of these marks, and finally print the results.

Q. 5 (a) Discuss the different types of loops used in Visual Basic with code example of each.

(b) Write a VB program to find the sum of series.
1, 3, 5, ……………. 99

ASSIGNMENT No. 2

Total Marks: 100

Note: All questions are compulsory and carry equal marks.

Q. 1 (a)   Explain the concept of Control Array? Explain the two ways of creating the Control Array.

     (b)   Explain two-dimensional array with example. Write the VB code to fill a two dimensional array (rows = 6, column = 5).

Q. 2 (a)   Explain Function Procedures and Sub Procedures with example.

     (b)   Write an event procedure that accepts two strings m and n as input. The procedure should print whether m is a substring of n or not. Don't use any library function for finding whether one string is substring of other.

     (c)   Write an event procedure to count the number of positive numbers, negative numbers and zeroes in a given list of 10 numbers that are given as input. Also, design the layout for an interactive front end with appropriate controls.

Q. 3 (a)   Write the steps to be followed to add any object from the tool box to any application.

     (b)   Explain different file controls add also mention their use on the form.

Q. 4 Explain the following terms used in the object linking and embedding:

     (i)   Object   (ii)   Linked object   (iii)   Embedded object
     (iv)   Container application   (v)   Source application

Q. 5 (a)   How many ways are there to specify colors in VB? Illustrate with example.

     (b)   Discuss Line method in VB graphics with example.

3435 Visual Basic & Database Interface

Recommended Book:
Mastering In Visual Basic 6.0 by Evangelos Petroutsos

Course Outlines:
Unit#l Introduction

     Traditional Programming Versus Visual Basic, Introduction to Visual Basic, Terminologies used in Visual Basic, Working with Integrated Development Environment IDE), Your first VB Project (Creating, Saving And Running a Simple Project)

Unit#2 Working with Form and Controls
Introduction to Properties, Events and Methods, Form Object, Label, Text box, Command Button Control, Check box and Option button Controls, Programming Projects

Unit#3 Fundamental of Programming in Visual Basic
Working with Visual Basic Data types, Variables and Constant, Input/Output in Visual Basic, Operators, Programming Projects

Unit#4 Decisions and Loops
Control Flow Statement (If-then, If-then-else, Select Case Statement), Loop Statement (Do..Loop, For..Next, While..Wend), Nested Control Statement, Programming Projects

Unit#5 Arrays and Procedures
Array Declaration (Single & Multidimensional Arrays), Storing and Accessing Data in Array, Control Array, Visual Basic Procedures, Visual Basic Function, Programming Projects

Unit#6 VB Menus and MDI Form
Designing and Using Menus, Menu Builder, Menu Properties, Manipulating Menus at Runtime, Menu Arrays, SDI (Single Document Interface) Form ,MDI (Multi Documents Interface) Form and its Child, Programming Projects

Unit#7 Additional Control and Object
List Box and Combo Box, Scroll Bar and Slider control, File controls, Drawing Control (Line, Shape, Image), Common Dialog Box Control (Color Dialog Box, Font Dialog Box, File Open and File Save Dialog Box, Print and Help dialog box), Programming Projects

Unit#8 Database Programming with Visual Basic
Introduction to Database, Data Control (Properties, Methods), Understanding Relational Concepts (Using SQL), Using the Visual Manager (Creating Database and Entering Data in VB), Validating Data, Using Data Bound List Control, Programming Projects

Unit#9 ADO Controls, Data Report and Using the Debugger
The ADO Data control Connecting ADO Control to Data, Using SQL, Finding data, Table Updates, Adding Data Reports to Project, Designing & Printing Data Reports, Using the Debug Toolbar, Watch, Immediate and Local window, Programming Projects

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