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University Examinations 2013/2014

STAGE 5, EXAMINATION FOR DIPLOMA/CERTIFICATE IN INFORMATION TECHNOLOGY

DIT 0502: ADVANCED EVENT DRIVEN PROGRAMMING

DATE: APRIL 2014

TIME: 1½ HOURS

INSTRUCTIONS: Answer questions *one* and any other *two* questions

QUESTION ONE - (30 MARKS)

- a) Explain what is meant by each of the following.
- i. DAO (3 marks)
 - ii. RDO (3 marks)
 - iii. ADO (3 marks)
- b) Write a code that creates the following dialog box. (3 marks)
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- c) What is an Array? (2 marks)
- d) Using clear examples show how you can -:
- i. Create a Fixed array called Numbers, which can accommodate ten (10) whole numbers as elements. (2 marks)

- ii. Create a Dynamic array on one line then set the array on another line so that it can accommodate five (5) elements. (4 marks)
- e) Write a program statement that checks whether a text box call 'txtAge' contains a number or not. (2 marks)
- f) Define the following Errors : (6 marks)
 - i. Syntax Error
 - ii. Logical Error
 - iii. Run-time Error
- g) Using an example show how a user defined function is declared. (2 marks)

QUESTION TWO (15 MARKS)

- a) Explain the steps taken to generate Data Report in VB 6.0 using the Data Environment as the data source. (14 marks)
- b) In Visual Basic 6.0 one can connect to the database using various methods. Briefly state any two methods of database connectivity. (1 mark)

QUESTION THREE (15 MARKS)

- a) In reference to database connection explain the following data binding properties. (5 marks)
 - i. Data source
 - ii. Data Member
 - iii. Data Field
 - iv. Data Format
 - v. Record Source
- b) Differentiate between Fixed-Size Arrays by using appropriate examples: (4 marks)
- c) Given the text box named txtColor write the code for the validate event, such that the user is forced to type not only something, but something numerical. (6 marks)

QUESTION FOUR – (15 MARKS)

- a) Write a program code that creates a textfile in the local disk with the name MyStory.txt and input data. (5 marks)
- b) When developing applications, the solution developer should ensure that the user makes minimal errors when interacting with the application. List and explain some of the ways of implementing validation by the programmer. (10 marks)

QUESTION FIVE (15 MARKS)

- a) Write code that , when command 1 button is clicked, will set the caption of label 1 as “Welcome” and label 2 as “Please enter your name below:” (5 marks)
- b) We will create a program that calculates and displays the average of your midterm and final marks. First of all we prepare a form as shown below by using the basic controls such as label, textbox and command buttons. (10 marks)

The program user enters the midterm and final marks to the textboxes Text1 and Text 2 and clicks on command 1. The label 4 is used for displaying the average of the grades entered on Text1 and Text2, where the other labels (1, 2 and 3) are used for giving the information to the user. Provide code to implement this with error handling. (10 marks)