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University Examinations 2013/2014

SECOND YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE IN BACHELOR OF INFORMATION TECHNOLOGY

BIT 2206 – APPLICATION PROGRAMMING II

DATE: DECEMBER 2013

TIME: 2 HOURS

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

QUESTION ONE – 30 MARKS

- (a) Discuss criteria which can be used to evaluate an application. (6Marks)
- (b) Explain giving examples the difference between active X control and DLL (6Marks)
- (c) The following is a discounting system used to award the customer depending on the value of goods purchased.

Value	Discount (%)
≤ 1000	Nil
1001-3000	5
3001-5000	10
5000-75000	15
> 7501	20

- (i) Write the validation code for the textbox such that:
- The user is forced to type some data in the textbox once it receives focus.

- The data typed must be a numeric positive value in. (4Marks)
- (ii) Write a function called discount that accepts the purchase as the input and returns the discount awarded as the return value according to the table above.

Use

The select..case structure. (6Marks)

- (d) Outline the main strength of component based application development. (4Marks)
- (e) Discuss two ways of making application reusable in visual basic. (4Marks)

QUESTION TWO –20 MARKS

(a) Outline the basic requirements of a good user interface. (4Marks)

(b) Write SQL command to create a table named product with the following details.

- (i) Product
- (ii) Number items
- (iii) Source
- (iv) Category
- (v) Price
- (vi) Description (4Marks)

(c) Draw a graphical representation of a form which could be used to capture product details. (3Marks)

(d) Write code to facilitate functionality of the form in 2 (c) (9Marks)

QUESTION THREE – 20MARKS

(a) Discuss the following standard controls used in Visual Basic (10Marks)

- (i) Tool bar
- (ii) Data grid
- (iii) Richtext box
- (iv) Treeview
- (v) Common dialog box

(b) The dialog boxes are important in interacting with the users.

- (i) Write the general syntax of the inputbox function. (3Marks)
- (ii) Draw an inputbox produced by the following statement.

InputBox “Type the Student Number”, Search Student Record”, BIT – 000-0000/2000” (2Marks)

- (c) Dialog boxes enable the interaction between the user and the program.
- (i) Explain THREE categories of Dialog Boxes used in Visual Basic. (3Marks)
 - (ii) A dialog box can be displayed as either modal or modeless. Explain. (2Marks)

QUESTION FOUR – 20MARKS

- (a) Explain work of any data aware control. (2Marks)
- (b) Differentiate between object linking and embedding (OLE) and ActiveX Data Objects (ADO) (4Marks)
- (c) Briefly explain the four data access components used in vb.net (8Marks)
- (d) Describe the four steps for establishing the ADO.net connection object. (6Marks)

QUESTION FIVE – 20MARKS

- (a) Describe the universal data access model. (6Marks)
- (b) Using sample queries differentiate between DML and DCL commands. (8Marks)
- (c) A database in drive C named property.mdf is contained in a directory named system. Use the ADO component to declare, initiate and open the connection and dataset objects. A table named asset is used and all fields are selected. (6Marks)