

KABARAK



UNIVERSITY

UNIVERSITY EXAMINATIONS

2009/2010 ACADEMIC YEAR

**FOR THE DEGREE OF BACHELOR OF BUSINESS MANAGEMENT
& INFORMATION TECHNOLOGY**

COURSE CODE: BMIT 126

COURSE TITLE: BUSINESS APPLICATION SOFTWARE

STREAM: Y1S2

DAY: MONDAY

TIME: 3.00 – 6.00 P.M.

DATE: 12/04/2010

INSTRUCTIONS:

- 1. This question paper has FIVE questions**
- 2. Answer question ONE and any other THREE questions**

PLEASE TURN OVER

QUESTION ONE (40 MARKS) COMPULSORY

(a) Explain the meaning of the following as used in programming

- i. Gerund
- ii. Variable
- iii. Computer program
- iv. HCI
- v. B2B

(10mks)

(b) Distinguish between

- i. Single and double VB data type
- ii. Procedural and declarative language
- iii. Validation rules and input masks

(6mks)

(c) ERP is a software that integrates almost all needs of a company. State five advantages and five disadvantages of ERPs

(5mks)

(d) Consider a student relation with the details

RegNo	Surname	OtherNames	Gender	DOB	DOA	ProgCode
65001	Kami	Rosemary	F	02/28/1989	05/13/2008	BMIT
65003	Maina	Emmanuel Tum	M	06/03/1988	05/13/2008	BSc
65004	Ali	Henry	M	03/17/1988	05/13/2008	BMIT

What is the output of the data if the following SQL select criterion is used?

(4mks)

Field	RegNo	Surname	Other Names	Name: [surname+’ ‘ +othernames]	Gender	DOB	DOA	ProgCode
Sort				ascending				
Show	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>			
Criteria								‘BMIT’

(e) Write a simple VBA program that displays the following two lines on a message box when the program is executed

(4mks)

Welcome home!
A place of peace and love.

(f) The following five relations are all in Third Normal Form and have been produced by normalization from books purchased by customers. Construct a Third Normal Form entity model from these relations. Do not show optionality or include relationship names.

(7mks)

PURCHASE
purchaseOrderNumber
 purchaseDate
 publisherCode

PUBLISHER
publisherCode
 publisherName

ORDER
purchaseOrderNumber
ISBN
 Quantity

BOOK
ISBN
 bookTitle
 authorCode

AUTHOR
authorCode
 authorName

(g) Use a for next loop to write a VB code that finds the sum of numbers from 1 to 10 (4mks)

QUESTION TWO (20 MARKS) ELECTIVE

- (a) What is usability design? (2mks)
- (b) Usability heuristics refers to the applications are designed to make more user friendly. Explain any nine usability heuristics that exist. (9mks)
- (c) Discuss on the three types of application users (9mks)

QUESTION THREE (20 MARKS) ELECTIVE

- (a) Explain any two data integrity constraints applied in databases (4mks)
- (b) Below is a sample data is student results table in an exam database
 CourseStudied

RegNo	CourseCode	CF	Assignment1	Assignment2	Average
65001	BMIT 126	6.0	50	40	45
65001	BIB 220	3.0	20	30	25
65003	BIB 220	3.0	40	30	35
65001	BMIT 216	6.0	70	60	65
65003	BMIT 216	6.0	60	80	70

Using the information given above,

- i. To produce access design that includes the appropriate fieldname, data type, data type Size/format, and validation/input mask rules (5mks)
- ii. Write two calculated SQL fields for sum and average of the two assignments
- iii. Write a validation rule that ensures that CF data is either 3.0, 3.5 or 6.0 (2mks)
- iv. What is the output of the data if the following SQL select criterion is used? (5mks)

Field	RegNo	CourseCode	CF	Assignment1	Assignment2	Sum	Average
Sort				ascending			
Show	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Criteria							>40

QUESTION FOUR (20 MARKS) ELECTIVE

(a) What is the meaning of control structures (3mks)

(b) Explain the following control structures as used in VBA

- i. For next
- ii. do while loop
- iii. if-then-else
- iv. select case

(8mks)

(c) Differentiate between conditional structures and loop structures in VB

(4mks)

(d) (i) Explain what each of the following VB code line does when executed (5mks)

```
Dim Blah As Integer
Blah = 2
Print 2 + 3
Print "2 + 3"
Print Blah + 3
Print Blah
Blah = Blah + 1
Print Blah
Blah = Blah + Blah
Print Blah
```

(ii) What will be printed on the form after executing the code

(3mks)

QUESTION FIVE (20 MARKS) ELECTIVE

(a) What is data control method (3mks)

(b) Explain four data control methods for records navigation in a database (4mks)

(c) The data below is of an invoice for a company's customers in UNF. Normalize the data contained in the invoice to Third Normal Form (8mks)

```
InvoiceNumber
DateOfInvoice
CustomerNumber
CustomerName
Address
```

ProjectCode
ProjectDescription
StartDate
FinishDate
PersonDays
Cost

- (d) VBA can be used to accessing and manipulate database data. Describe how you can create VBA form to access the following relation from a **bookpurchase** database (5mks)

PUBLISHER

publisherCode	publisherName
MCG	McGraw-Hill
MAC	McMillan
LHN	Long-Horn