



MURANG'A UNIVERSITY COLLEGE
 (A Constituent College of Jomo Kenyatta University of Agriculture and Technology)
 University Examinations 2015/2016
SECOND YEAR SECOND SEMESTER SPECIAL/SUPPLEMENTARY
EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
INFORMATION TECHNOLOGY

BIT 2323: APPLICATION PROGRAMMING II

COURSE: B.Sc. IT
DAY/TIME: 2.00PM

TIME: 2HRS
DATE: 30/06/2016

Instructions: Answer Question 1 and Any Other Two.

Question One (30 marks)

- (a) Explain the purpose of the following tools (6 Marks)
- i. ToolStripContainer
 - ii. StatusStrip
 - iii. MenuStrip
- (b) Write a program using a function procedure called **Commission** to calculate and return a salesperson's commission based on sales amount as indicated on the table below:

SALES (Kes)	SALES COMMISSION (%)
Less than 1000	0
1001-2000	5
2001-5000	8
5001-10000	10
10001 and above	15

(12 marks)

- (c) Write a program that accepts two numbers via InputBox and adds those numbers and output results via MessageBox. (7 Marks)
- (d) Explain the following terms as used in database applications (5 Marks)
- i. Binding source
 - ii. Table adapter
 - iii. Dataset

- iv. ADO
- v. Data Source

Question Two (20 marks)

(a) In relation to vb.net describe the following terms (10 Marks)

- i. Abstraction
- ii. Encapsulation
- iii. Polymorphism
- iv. Constructor

(b) With use of a array of structure consider the following employee details:

FirstName, LastName, EmployeeNo, HireDate and Designation

Write a program that can input the details of ten (10) employees and output via listbox

(10 marks)

Question Three (20 marks)

(e) The System. Collections namespace provides classes for several types of collections.

All of the collection classes have properties and methods. List five Examples of collection types (10 Marks)

(f) You are provided with a MS-Access database (StudentsDatabse.mdb), which has one table (Student) and a Visual Basic form interface to allow adding, deleting and searching records. You are required to write code to allow linking to the database and provision of the above functions. (10 marks)

Question Four (20 marks)

(a) Write a program that writes and reads the name of a student and his/her phone number from a file and displays them on the form, and each time the user clicks **Next**, the program reads and displays the next record (10 Marks)

(b) Explain **five(5)** common dialog components provided with Visual Studio (5 Marks)

(c) Explain the use of the following controls (5 Marks)

- i. TreeView
- ii. ListView
- iii. TabControl
- iv. GroupBox