TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

Bsc IT Sept 2015

BIT 2118   : **APPLICATION PROGRAMMING I**

END OF SEMESTER EXAMINATION

SERIES:DECEMBER2016

TIME:2HOURS

DATE:Pick DateSelect MonthPick Year

Instructions to Candidates
You should have the following for this examination
-Answer Booklet, examination pass and student ID
This paper consists of **FIVE** questions. Attemptquestion ONE (Compulsory) and any other TWO questions.
Do not write on the question paper.

QUESTION ONE (30 MARKS)

1   a)   List Four guidelines to be followed when developing User Interface

                     (4 Marks)

     b)   Explain functions of three Windows contained in the Visual Basic

          Integrated development environment (IDE)   **(6 Marks)**

     c)   Explain any Four controls that can be used to get users choice in Visual Basic

                     (4 Marks)

     d)   Explain what is mean by 'comment' as applied to programming.

                     (2 marks)

     f)   Explain with example the format of implementing following:

          i.   Variable.
         ii.   Constant.
       iii.   Comment

                     (3 marks)

     g)   Write an event procedure that will accept an integer form users and

          test if it is even or odd.   **(4 Marks)**

     h)   Explain the use of the following in Visual Basic:

          i)   Isnumeric
         ii)   Ccurr
        iii)   Val
        iv)   Isnull   **(4 Marks)**

     i)   Explain the essence of documentation in programming

                     (3 Marks)

2   a.   List any four Find methods   **(2 Marks)**

     b.   Develop a Visual Basic program to output the following:

```
        : *
       +  **
      ** ***
     *** ****
    ****  +++++
   *****  ******
```

                     (4 Marks)

c. Write a Visual Basic statement to declare an array to store names
of 50 students **(2 Marks)**

d Distinguish between a Binary operator and Unary operator giving
an example of each **(4 Marks)**

e State **Four**Visual Basic rules in naming rules **(4 Marks)**

f Explain challenges faced by programmers in using VB .net to
write a mobile application **(4 Marks**

3 a. Describe any four types of 'recordsets' stating one advantage of each
(10 Marks)

b. Sate any three options that can be used when opening a recordset
(4 Marks)

c) Explain any three types of errors in Visual Basic
(6 Marks)

4 a. A class of 20 students sat for an exam. Write a Visual Basic procedure that will
read the marks of the 20 students and output the number of students who passed the
exam and the number who failed. The pass mark is the average mark. Attach the code
to command button **(10 Marks)**

b. Distinguish between static and dynamic arrays. An array 'EmpSal' has been as
static array to store employee salaries; write Visual Basic code to store salaries of 20
more employees in the array, without loosing any data stored in it.

(4 Marks)

c List any two
i. Relational
ii. Logical operator used in Visual Basic
(4 Marks)

d List any two event ,apart from mouse events that can be used in Visual Basic
codes.
(2 Marks)

5   a.   Write a Visual Basic code that will display 'The mean mark is 85' and 'The final Grade is A' on two separate line on a MsgBox

(3 Marks)

b.   Using suitable example explain module operator:

(2Marks)

c.   Explain 'passing parameter by value and by reference' as applied to Visual Basic. Give an example of each, using Visual Basic syntax.

(7 Marks)

d   Explain the use of the following statements:

        I.   Break.
      II.   Continue   **(4 Marks)**

e   Describe Ms Common Dialog control and any Two methods associated with the control

(4 Marks)