



MACHAKOS UNIVERSITY

University Examinations for 2018/2019

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FOURTH YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

BACHELOR OF SCIENCE (COMPUTER SCIENCE)

SMA 492: COMMERCIAL PROGRAMMING

DATE:

TIME:

INSTRUCTIONS:

Answer Question One and Any Other Two Questions

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Give THREE general features of VB.NET programming language. (3 marks)
- b) Describe IDE stand. (2 marks)
- c) Mention FIVE various Data Types in VB.NET. (5 marks)
- d) Explain the difference between Exit() and End() and how do they are used. (4 marks)
- e) Describe and give an example in each case FOUR common types of operators used in
- f) Describe TRACE class in VB.Net. (3 marks)
- g) Write down a query to display student IDs with maximum marks in two subjects. (6 marks)
- h) Give THREE types of loops and control structures used in VB. NET. (3 marks)

QUESTION TWO (20 MARKS)

- a) Briefly explain what Delegate is in VB.NET. (2 marks)
- b) Explain THREE relational operators that can be used in VB. (3 marks)
- c) Write a simple program that utilizes The Select Case Statement. (4 marks)
- d) Describe at least FOUR advantages of using VB.Net as a professional language. (8 marks)

- e) Write down the source code to display the picture in a button click event. (3 marks)

QUESTION THREE (20 MARKS)

- a) Describe the various basic parts that make up a VB.Net program. (6 marks)
- b) Mention the ways in which a function can return value in VB.NET. (4 marks)
- c) As a programmer in VB.NET is it possible to create a function that can accept a varying number of arguments in VB.NET. (2 marks)
- d) Explain the difference between DataSet and DataTable. (4 marks)
- e) The following example makes use of various types of variables in Visual Studio .NET. Give the output of the program when compiled and executed. (4 marks)

Module variablesNdatatypes

Sub Main()

Dim a As Short

Dim b As Short

Dim b As Short

a = 10

b = 10

c = a + b

Console.WriteLine("a = {0}, b = {1}, c = {2}", a, b, c)

Console.ReadLine()

End Sub

End Module

QUESTION FOUR (20 MARKS)

- a) Describe An array. (2 marks)
- b) Give the syntax consideration and provide an example of how variables are declared in VB. NET. (4 marks)

- c) Differentiate between an Object and a Class as used in VB.NET and give an example in each case to illustrate the difference. (4 marks)
- d) Draw a flowchart for a program that will compute the average and the Product of three numbers (6 marks)
- e) Write VB.NET code to prompt a user to input his/her name and then the output will be shown as an example below:

Hello John! (4 marks)

QUESTION FIVE (20 MARKS)

- a) Describe what you understand by a programming language. (2 marks)
- b) Describe THREE types of controls in VB.NET. (6 marks)
- c) Write VB.NET code to declare a variable to store the age of a person and prints the output of the program. (8 marks)
- d) Differentiate between shared methods and shared variables. (4 marks)