



MACHAKOS UNIVERSITY

University Examinations for 2017/2018

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

**SECOND YEAR FIRST SEMESTER EXAMINATION FOR
BACHELOR OF SCIENCE (COMPUTER SCIENCE)**

SCO 202: EVENT DRIVEN PROGRAMMING

DATE: 5/12/2017

TIME: 8:30 – 10:30 AM

INSTRUCTIONS

Answer Question ONE and Any Other TWO Questions.

QUESTION ONE (30 MARKS)

- a) A vb.net program basically consist of the following parts. Explain (5 marks)
 - i. Namespace declaration
 - ii. Module
 - iii. Variables
 - iv. Statement and expression
 - v. Comments
- b) ADO.NET is said to provide a disconnected data access model. Explain (2 marks)
- c) Outline three rules for declaring variables in VB.Net. (3 marks)
- d) Describe the roles of CLR in .net framework. (5 marks)
- e) There are 3 control structures in computer Programming. List and explain them. For each control structure, give at least 1 statements used to implement it in VB.NET (6 marks)

- f) Write a visual basic net program that would accept a number through a text box. The program should then compute the square and the square root of the number and display the output in a message box. (9 marks)

QUESTION TWO (20 MARKS)

- a) List available modifiers in VB.net. (5 marks)
- b) Explain the following category of statement.
- i. Declarations statements (3 marks)
 - ii. Executable statements (3 marks)
- c) State four reasons that make visual basic net a widely used professional language. (4 marks)
- d) Write a program in visual basic.net that will prompt the user to input two integers through a text box, using if...then...else, the program should compare the two integers input and output the largest between them by use of a message box. (5 marks)

QUESTION THREE (20 MARKS)

- a) Discuss any two floating point data types found in visual basic.net. (3 marks)
- b) Parameters can receive an argument value using either byval or byref explain how? (3 marks)
- c) Discuss the three types of programming errors. (6 marks)
- d) Write VB.NET code to produce the output shown below on a console: (8 marks)

0000000

111111

22222

3333

444

55

6

QUESTION FOUR (20 MARKS)

- a) Explain what is meant by assembly and outline the types of assemblies. (7 marks)
- b) There are mainly two types of events in Vb.net explain how the following events occurs.
 - i. Mouse events (3 marks)
 - ii. Keyboard events (3 marks)
- c) Write a visual basic.net code that multiplies two numbers. (7 marks)

QUESTION FIVE (20 MARKS)

- a) Functions and sub procedures are used to break down code into functional components. Explain the difference between Functions and Sub procedures as used in VB.NET. (6 marks)
- b) Discuss any six (6) primitive data types found in visual basic.net (3 marks)
- c) Explain the roles of the Net framework class library (5 marks)
- d) Write down the output of the following code segment (6 marks)

Dim i, j, k As Integer

For i = 1 To 7

For j = 1 To i

Console.Write(j)

Next

For k = 7 - i To 1 Step -1

Console.Write("")*

Next

Console.WriteLine()

Next