



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations 2013/2014

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

SECOND YEAR FIRST SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF COMMERCE

BMS 201: COMPUTER PROGRAMMING

Date: EVENING CLASS

Time: 2 HOURS

INSTRUCTIONS

- Answer question one and any other two

Question ONE Compulsory

- Define the term computer programming. [1 marks]
- Differentiate between the following terms as used in computer programming. [4 marks]
 - Syntax and Semantics
 - Compile time and run time
- List the main parts that make up a C program. [5 marks]
- Write a simple C program that displays the message *"I am a Computer Programming Student at Machakos University College"*. The program code should include all the key sections in a C program. [5 marks]
- List and Explain at least FIVE characteristics of a good programming language [5 marks]
- Describe the following languages as used in computing. [6 marks]
 - Machine languages

- ii. Assembly languages
- iii. Higher-level languages

g. Define the following terms as used in computing programming. **[4 marks]**

- i. Algorithm
- ii. Program

Question TWO

a. Define the following terms as used in programming. **[4 marks]**

- i. Variable
- ii. Data type
- iii. Function
- iv. Identifier

b. Discuss the THREE key features of a valid algorithm. **[6 marks]**

c. Describe at least FIVE key stages / steps that are needed in the development of an algorithm. **[5 marks]**

d. List any FIVE operators that are used by programming languages in program development. **[5 marks]**

Question THREE

a. Discuss any FOUR reasons why an algorithm is very important in problem solving **[8 marks]**

b. A typical programming task can be divided into two phases. List and Explain the TWO phases. **[4 marks]**

c. From the screen interface below, write the appropriate Visual Basic code that can be used to compute the “**Result**” when the “**Compute**” button is clicked; Result is the sum of value 1 and value 2. **[5 marks]**

The image shows a screenshot of a Windows application window titled "Form1". Inside the window, there is a smaller container box. Within this container, there are three text boxes arranged vertically. The first text box is labeled "Value 1" and contains the number "12". The second text box is labeled "Value 2" and contains the number "24". The third text box is labeled "Result" and contains the number "36". Below these text boxes, there is a button labeled "Compute".

- d. List any THREE programming languages that can be used to develop computer programs. **[3 marks]**

Question FOUR

- a. Discuss the key stages in the program development regardless of any programming language to be used in the implementation **[6 marks]**
- b. With the help of examples in each case, discuss the following types of programming paradigms **[6 marks]**
- Event Drive Programming
 - Structured Programming
 - Object Oriented Programming
- c. Using a flow chart draw a general form of a typical decision making structure found in most of the programming languages. **[5 marks]**
- d. List the THREE generations of the High Level Languages. **[3 marks]**