THE TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

CERTIFICATE IN INFORMATION TECHNOLOGY

EIT 1133: INTRODUCTION TO COMPUTER PROGRAMMING

END OF SEMESTER EXAMINATION

SERIES: APRIL 2013
TIME: 2 HOURS

<u>**Instructions to Candidates:**</u>
You should have the following for this examination

This paper consists of **FIVE** questions. Attempt question **ONE** and any other **TWO** questions
Maximum marks for each part of a question are as shown
This paper consists of **TWO** printed pages

Question One (Compulsory)

a) Explain any **FIVE** logical/comparison operators.   **(10 marks)**

b) Explain the program development life cycle.   **(10 marks)**

Question Two

a) Explain any **FOUR** arithmetic operators as used in visual basic programming language.

                                                                                            (8 marks)

b) Write a visual basic (VB) program to calculate the area of a circle. Given:
    Area = 3.14* radius * radius   **(10 marks)**

c) State any **TWO** data types in visual Basic programming language.   **(2 marks)**

Question Three

a) Explain the term variable as used in programming.   **(2 marks)**

b) Explain the following terms:
    (i)   Compiler
    (ii)   Interpreter
    (iii)   Translator
    (iv)   Object code   **(8 marks)**

c) Write a program pseudo code to read three integer values and calculate sum and average.

                                                                                            (10 marks)

Question Four

Explain the **FIVE** categories of programming languages.   **(20 marks)**

Question Five

a) Draw a flowchart to read the name, hours and rate of pay. The program should calculate the Gross
    and Net pay given the following:
        Gross = hours* rate
        If Gross > 10000 then
        Netpay = Gross – 4000
        Else
        Netpay = Gross   **(10 marks)**

b) Write a visual basic program to implement Q5 (a) above.   **(10 marks)**