TECHNICAL UNIVERISTY OF MOMBASA

UKUNDA CAMPUS
Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

CERTIFICATE IN INFORMATION COMMUNICATION TECHNOLOGY & MAINTENANCE
(CICT 13M)

ECS 1101: INTRODUCTION TO COMPUTER PROGRAMMING

END OF SEMESTER EXAMINATION
SERIES: DECEMBER 2013
TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
- *Answer Booklet*

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 the features machine programming languages.   **(5 marks)**

b) Describe any FOUR disadvantages of machine programming languages.   **(8 marks)**

c) Draw a program flow chart to calculate the area of a triangle given:
       Area = ½ (base x height)   **(7 marks)**

Question Two

a) Explain the following terms:
    (i)   Algorithm
    (ii) Pseudo code
    (iii) Flow chart
    (iv) Object code   **(8 marks)**

b) Write a visual basic program to calculate area and perimeter of a circle given the following:
       $A = \pi r^2$

       $Perimeter = 2\pi r$
                                                                                  (10 marks)

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

Question Three

a) Explain the rules of naming variables in Visual Basic Programming Language.**(8 marks)**

b) Write a program pseudo code to read FOUR integer values and calculate sum and average.
                                                                                  (8 marks)
c) Explain the following term:
    (i)   Portability
    (ii) Module re-use   **(4 marks)**

Question Four

a) Explain any FOUR arithmetic operators as used in Visual Basic Programming Language.
                                                                                  (8 marks)
b) Write a Visual Basic (VB) program to read three integer values, compare them and display the largest.   **(10 marks)**

c) State any TWO data types in Visual Basic Programming Language.   **(2 marks)**

Question Five

a) With aid of example, explain comparison operators.   **(10 marks)**

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