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)