THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

MAIN EXAMINATION

AUGUST - DECEMBER 2018 TRIMESTER

FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING AND FINANCE

REGULAR PROGRAMME

CID 084: COMPUTER PROGRAMMING

Date: DECEMBER 2018	Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and ANY OTHER TWO Questions

Q1. a) Explain and give two examples of how computer programming can be used to solve day to day problems in organizations **(4 Marks)**

   b) Define the following terms as used in computer Programming. **(6 Marks)**
   a) Writing Program
   b) Compiling Program
   c) Executing Program

   c) What is logical error? **(3 Marks)**

   d) Explain how a for loop differ from a while loop. **(3 Marks)**

   e) What is an Array? **(4 Marks)**

   f) Using C++ Programming language, write a program that can do summation of two integers prompting for input from the keyboard and representing the results on the screen as an output. **(4 Marks)**

   g) Giving two examples and explain what is initialization of variables?**(6 Marks)**

Q2. a) Explain the following terms as used in computer programming.
   (8Marks)
   a) Variables
   b) Source code

ISO 9001:2008 Certified by the Kenya Bureau of Standards

c) String
d) Execution

b) State and Explain the Different Languages Used in Computer Programming
(6Marks)

c) What will be the output of this code? **(4 Marks)**
```cpp
# include <iostream>
# include <string>
using namespace std;
int main( )
{
  string cid084 = "this is a programming class";
        std::cout<<cid084;
  return 0;
}
```

Q3. a) How do Semantic Errors occur in the written code?   Give an example of a semantic error. **(4 Marks)**

b) Explain your understanding of syntax error. Give at least two examples of syntax errors. **(4 Marks)**

d) Explain these two commands as used in C++ Programming. **(4 Marks)**
    a) Std::cout<<
    b) Std::cin>>

e) Giving examples explain two data types used in C++ Programming?
(4 Marks)

f) Explain what are comments and how they are done in C++ giving atleast one example of a comment **(4 marks)**

Q4. a) Give two examples of high level programming languages. **(4 Marks)**

b) Write a program that outputs the square root of 900 and the square root of 9 when run **(8Marks)**

c) Programs regardless of the languages they are written in contain two fundamental parts. Clearly state and explain these Fundamental parts.
(4 Marks)

d) Write simple C++ code to output the following. **(4 Marks)**
    a. **Welcome to C++ Programming. Programming solves many day to day problems**