ICS 2276: COMPUTER PROGRAMMING II

CAT

INSTRUCTIONS:

1. All answers must be hand written.

2. Ensure that each individual signs for the cat before submitting. The class rep should enforce this.

*3. The **cat**, **signed list** for the cat, **class attendance** form and **quality assurance** form should be brought to technology house (hall 7) by **Thursday**, 27/06/2019 **noon**. Class reps should also enforce this.*

ALL THE BEST AS YOU PREPARE FOR THE EXAM.

PART ONE

1. Describe three different forms of inheritance in C++? (6mks)
2. What is the difference between while and do-while loop?(4mks)
3. If originally x=10 and sub=0 what is the value of sub after each of the expressions:
   a. i. sub=--x   (2mks)

   b. ii. sub=x--   (2mks)
4. Use the (for) loop to write a C++ program to display 20 numbers and their sum.
   (5 marks)
5. What is the difference between variable declaration and variable definition? Give an example. (6mks)
6. Use the (switch) statement to write a C++ program that accepts 5 single digit numbers and prints them in words. (5 marks)

PART TWO

1. What is the difference between call by value and call by reference in a user defined function in C++?   (4mks)
2. Write a program to accept two numbers and prints the sum of two numbers using functions.   (6 marks)
3. What is a constructor?   (2mks)
4. Differentiate between a Parent and a Child Class.   (4mks)
5. Write a C++ program to calculate sum of 5 subjects and find their percentage.
   (4 marks)
6. Write a program in C++ to convert the temperature from Celsius to Fahrenheit.
   a. Given formula as f = ((1.8*c) + 32).   (4 marks)
7. Identify three access specifiers for a class in C++?   (3mks)
   a. Which of the above (3. b) specifiers is default specifier for a class in C++? (1mk)
   b. Which access specifier/s can help to achive data hiding in C++? (2mks)