UNIVERSITY OF MINES AND TECHNOLOGY, TARKWA

FIRST SEMESTER EXAMINATIONS, NOV/DEC 2018

COURSE NO: PE 351

COURSE NAME: COMPUTER PROGRAMMING PRACTICALS

CLASS: PE III **TIME:** 3 HOURS

Name**:** _____Index Number: _____

Answer Only One Question

Question 1

A certain grade of steel is graded according to the following conditions:

I. Hardness must be greater than 50
II. Carbon Content must be less than 0.7
III. Tensile Strength must be greater than 5600

The grades are as follows:

Grade is A if all three conditions are met

Grade is B if conditions I and II are met

Grade is C if conditions II and III are met

Grade is D if conditions I and III are met

Grade is E if one condition is met

Grade is F if none of the conditions are met

Write a Visual Basic console application program which will require the user to input values of Hardness, Carbon Content and Tensile Strength of the steel under consideration and output the grade of the steel. Run the program for 10 user inputs and store the result in a text file.

[40 MARKS]

Question 2

Write a VB.Net console application program that requests set of 10 integer values from a user. It then prints into a text file:

- the maximum and minimum values entered using a function. If the user enters the values 3, 2, 5, 0, 4, 7, 10, 8, 12 and 1, the program would indicate that 12 is the maximum and 0 is the minimum; Your program should handle ties properly; for example, if the user enters 2, 4, 2, 3, 4, 7, 11, 10, 5 and 3, the program should report 2 as the minimum and 11 as the maximum.
- List of even values sorted in descending order and count of even values.
- List of odd values sorted in descending order and count of even values.

[40 MARKS]

Examiner: T. Kwantwi