SMA2276 COMPUTER PROGRAMMING II

SUPPLEMENTARY EXAM

QUESTION ONE (30 MARKS)

a) Outline the guidelines for use of identifiers in FORTRAN. (5mks)
b) What is the importance of subprograms in the FORTRAN programing language? (5mks)
c) Clearly distinguish between declaration and definition using array declarations as examples. (5mks)
d) Explain the steps involved in the problem solving approach. (5mks)
e) Describe the following terms as used in FORTRAN programming: (@ 1mk)
   i. Pseudo code
   ii. Module
   iii. Program
   iv. Algorithm
   v. Array
f) Write a subroutine that will take two real values and return the quotient. (5mks)

QUESTION TWO (20 MARKS)

a) Mention and explain the types of errors in programing. (10mks)
b) Write a program that will capture house owner details and store them in a file. (10mks)

QUESTION THREE (20 MARKS)

a) Differentiate between the following terms: (@2mks)
   i. Program and software
   ii. Function and subroutine
   iii. Constant and variable
   iv. Program and algorithm
   v. Select case and if…else statement

b) Write a program to calculate the hypotenuse of a triangle from the two sides. (10mks)

QUESTION FOUR (20 MARKS)

a) Write the syntax for and explain the various types of loops in FORTRAN programing. (10mks)
b) Write a subroutine to accept two integers and return their difference. (10mks)

QUESTION FIVE (20 MARKS)

a) Write a program to display a temperature conversion table from Celsius to Fahrenheit. (20mks)