COURSE CODE: CIT736
COURSE TITLE: COMPUTER PROGRAMMING
CREDIT UNIT: 2
TIME ALLOWED: 2 HRS
INSTRUCTION: ANSWER QUESTION ONE AND ANY THREE OTHERS

1(a) Define Syntax Error, Round-off Error, and Run-time Error. **(6 marks)**
(b) What is a computer program? **(4 marks)**
(c) Write a FORTRAN program to find the area of a triangle. **(5 marks)**
(d) Briefly discus Pascal and FORTRAN programing **(5 marks)**
(e) With example, briefly differentiate between Complex and Character data types. **(5 marks)**

2(a) What are allocatable Arrays in Fortran 90/95. **(5 marks)**
(b) Write an example of a program that ALLOCATE/DEALLOCATE an array with a size based on user input that can generate many random numbers **(10 marks)**

3(a) Write a short note on COMMON statement and its general format **(7.5 marks)**
(b) Show with an example how a COMMON statement appears in a program **(7.5 marks)**

4 Write short notes on the following programing concepts:
i.   Variable and its syntax   **(5 marks)**
ii.   Constant and its syntax   **(5 marks)**
iii.   Algorithm   **(2.5 marks)**
iv.   Flowchart   **(2.5 marks)**

5(a) Briefly describe the role of debugging in computer programming project. **(7 marks)**
(b) Differentiate between Correcting Design-Time errors and Runtime errors. **(8 marks)**