



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI-ABUJA
FACULTY OF SCIENCE
DEPARTMENT OF COMPUTER SCIENCE
2021_2 EXAMINATION 45678

COURSE CODE: CIT736

COURSE TITLE: COMPUTER PROGRAMMING

CREDIT UNIT: 2

TIME ALLOWED : 2 HRS

INSTRUCTION: ANSWER QUESTION ONE AND ANY THREE OTHERS

1. (a) Briefly define Syntax Error, Round-off Error, and Run-time Error. *(6marks)*
(b) What is a computer program? *(4 marks)*
(c) Write a FORTRAN program to find the area of a triangle. *(5marks)*
(d) Briefly discuss Pascal and FORTRAN programming. *(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) Define a COMMON statement and its general format. *(5 marks)*
(b) Show an example of how a COMMON statement appears in a program *(15 marks)*
4. Define the following programming concepts:
 - i. Variable and its syntax *(5marks)*
 - ii. Constant and its syntax *(5marks)*
 - iii. Algorithm *(2.5marks)*
 - iv. Flowchart *(2.5marks)*
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)*