



**NATIONAL OPEN UNIVERSITY OF NIGERIA
JABI FCT ABUJA
FACULTY OF SCIENCE
SEPTEMBER/OCTOBER 2016 EXAMINATION**

CIT736: Computer Programming

TIME ALLOWED: 3Hours

INSTRUCTION(S): Attempt any Five (5) questions

Question 1

- i) Identify the stages required to develop a good computer program - 6 marks
- ii) List and explain the main properties of a professional computer program - 12 marks

Question 2

Differentiate between the following terms (4 marks each)

- i) String and an integer variable using a Pascal expression
- ii) Conditional and unconditional branching statements
- iii) one and two-dimensional arrays
- iv) A translator and a compiler
- v) Internal and external procedures

Question 3

- i) Explain any five types of program errors that you know - 10 marks
- ii) Enumerate the major steps needed in dealing with errors in program compilation and execution - 5 marks
- iii) Differentiate between caching and buffering - 5 marks

Question 4

- i) What are Arrays? - 5 marks
- ii) Differentiate between static and dynamic arrays - 5 marks
- iii) List any 10 features of Fortran 90/95 - 10 marks

Question 5

- i) Differentiate between controls structures such as if..then...else statement and do while loop - 6 marks
- ii) Write a program in FORTRAN to convert centimetres into inches - 14 marks

Question 6

- i) Write an algorithm that accepts a person's hourly wage and calculates the person's Pay. Assume a withholding rate of 20%. - 10 marks

- ii) Develop a flowchart for the problem in question 6 (i) above -
10 marks