



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI - ABUJA
FACULTY OF SCIENCE
OCTOBER/NOVEMBER 2016 EXAMINATION

COURSE CODE: CIT392

COURSE TITLE: COMPUTER LABORATORY II

COURSE CREDIT UNIT: 2

TIME ALLOTTED: 2 HRS

INSTRUCTION: attempt any four (4) questions. Each question carries 17½ marks

Question 1

- a. With respect to the Java programming language and with the aid of examples, write short notes the following terms:
 - i. Classes (3 marks)
 - ii. Methods (3 marks)
 - iii. The *this* keyword (2.5 marks)
- b. The Central Bank of Togo has issued bank notes in denominations of 100, 50 and 1 Togolese Dollars. Write a Java program that accepts any integer amount supplied by a user and calculates the smallest number of bank notes required to issue that amount of money to the user. [Hint: For example, to issue 100 Togolese dollars, we need only 1 bank note] . (9 marks)

Question 2

- a. We want to determine the largest and the smallest number in a list of values. All values are integers. Write a C++ program that accepts the number of values from a user and then accepts the values themselves and then outputs which is the largest and which is the smallest. (13 marks).
- b. With respect to C++ arrays, define the following terms:
 - i. Array (1 mark)
 - ii. Index (1 mark)
 - iii. Dimension (1 mark)
- c. With the aid of an example, explain briefly C++ pointers (1.5 marks).

Question 3

a) Define the following;

- i) Object-Oriented Programming Language (1.5 marks)
- ii) Structured Programming Language (1.5 marks)
- iii) Procedural Programming Language (1.5 marks)

b) Outline the major features of;

- i) Object-Oriented Programming Language (2 marks)
- ii) Structured Programming Language (2 marks)
- iii) Procedural Programming Language (2 marks)

c) Contrast between;

- i) Object-Oriented Programming Language (2.5 marks)
- ii) Structured Programming Language (2.5 marks) and
- iii) Procedural Programming Language (2 marks)

Question 4

- (a) Outline any four elements of a Table in a Database.
- (b) Write briefly on the four.

(17½ marks)

Question 5

- (a) List any six Windows XP commands.

(17½ marks)

Question 6

- a) There are five (5) independent libraries for input/output operations in Ada. List them.
- b) Write short notes on the five (5).

(17½ marks)