



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

University Village, Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi – Abuja

**Faculty of Science**

**Department of Computer Science**

**APRIL/MAY, 2019 EXAMINATIONS**

**Course Code:** CIT 392

**Course Title:** Computer Laboratory II

**Credit:** 2 units

**Time allowed:** 2 hours

**Instructions:** Answer question ONE (1) and any other THREE (3) questions

- 1 a) Discuss the elements of C program (10 marks)
- b) Write short notes on the following terms with regards to C programming language:
- i) Function (3 marks)
- ii) Array (6 marks)
- c) List three typical data type in C and their memory requirements. (6 marks)
2. a) i) Mention the rules guiding all numeric-type constants. (2 marks)
- ii) What do you understand by a floating point constant? (2 marks)
- iii) Give examples of two (2) valid and two (2) invalid floating point constants (4 marks)
- b) What is a variable? (3 marks)
- c) Explain the following terms with regards to the Windows XP operating system;
- i) Icons (1 mark)
- ii) Taskbar (1 mark)
- iii) Notification area (1 mark)
- iv) Quick launch bar (1 mark)

3 a) What do you understand by Multidimensional Arrays? (2 marks)

b) The following table specifies the major contents of four brands of breakfast cereals.

Commodity	Fiber	Sugar	Fat	Salt
Top flake	12g	25g	16g	0.4g
Cornabix	22g	4g	8g	0.3g
Oatabix	28g	5g	9g	0.5g
Ultraban	37g	7g	2g	0.2g

i) Discuss briefly a two-dimensional array to capture this data (4 marks)

ii) Write a function which outputs this table element by element. (6 marks)

c) Discuss in detail what you understand by a pointer in C++. (3 marks)

4 a) Define Control structures (3 marks)

b) Write short notes on:

(i) Any two (2) Java control structures. (6 marks)

(ii) Any two (2) subtypes of each control structures discussed in (i) above (6 marks)

5. a) What are Java Packages? (5 marks)

b.) In tabular form, give 5 examples of Maths Methods in Java and the function of each.

(10

marks)