

## 14/16, Ahmadu Bello Way, Victoria Island

## SCHOOL OF SCIENCE AND TECHNOLOGY October, 2013 Examination

**Course Title: Introduction to Object-Oriented Programming** Time Allowed:  $2^{1}/_{2}$  Hours. **Course Code: CIT 383** Credit Unit: 2 Credits Answer any four (4) questions. Total Score is 100 and each question carries 25 marks 1a. What is a programming Language? (5 marks) 1b. List and explain any two categories of programming Language (10 marks) 1c. List five (5) popular programming Languages (10 marks) 2a. Explain the term "Object Oriented Programming Language" (8 marks) 2b. Describe an inheritance in Object Oriented Programming? (8 marks) 2c. List three main features of Object Oriented Programming? (9 marks) 3a. Write a short note on each of the following: (i) Overloaded Method and Overridden Method (5 marks) (ii) Local Variables and Instance Variables (5 marks) (iii) Set and Get Methods (5 marks) 3b. What do you understand by Recursive Operator (4 marks) 3c. Mention the three (3) ways to call a method (6 marks) 4a. What do you understand by Operator Overloading? (4 marks) 4b. List and explain three key restrictions to overloading the conversion operators (12 marks)

4c.List the three (3) logical operators that can be directly overloaded for a class

(9 marks)

| 5a What is the difference between a Class and an Object? |     |
|--|-----|
| (10 marks)   |     |
| 5b. What do you understand by the term methods?          | (5  |
| marks)   |     |
| 5c. List five (5) examples of methods                    | (10 |
| marks)   |     |

- 6a. Explain the term "downcasting" (5 marks)6b. List and explain two main types of polymorphism. Give an example of each. (8 marks)
- 6c. Enumerate, giving examples, any four (4) examples of Message passing styles (12 marks)