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**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS**

**SCHOOL OF SCIENCES AND TECHNOLOGY**

**MAY/JUNE 2012 EXAMINATION**

**CIT 383: INTRODUCTION TO OBJECT ORIENTED PROGRAMMING (2 CR )**

**TIME ALLOWED: 21/2HRS**

**INSTRUCTIONS: Answer any four (4 ) questions**

1a. Briefly describe Object Oriented Programming.(9 marks)

 b. What do you understand by inheritance in Object Oriented Programming?(8 marks)

c. List four object-oriented object-oriented programming concepts you know(8 marks)

2a. What do you understand by the term Encapsulation? (4 marks)

b. List and explain the two main types of polymorphism you know. Give an example of each. (12

marks)

c. Enumerate, giving examples, any three (3) examples of Message passing styles (9 marks)

3a. What do you understand by the term methods? (5 marks)

b. Write short notes on the following: (15 marks)

1. Composition
2. Abstraction
3. Information hiding

c. List five (5) examples of methods (5 marks)

4a. What is the full meaning of the following acronyms: (2 marks each)

1. ADT
2. OOD
3. OOP
4. JVM
5. API

b. Outline and explain each of the advantages of software reusability (9 marks)

c. Briefly explain two major aspects of Object Oriented Programming that promotes software

reuse (6 marks)

5a. What do you understand by Recursive Operator (4 marks)

b. List and explain three (3) motivations for modularizing a program into methods (12 marks)

c. Mention the three (3) ways to call a method (9 marks)

6a. What do you understand by Argument promotion? (8 marks)

b. List and explain three key restrictions to overloading the conversion operators (9 marks)

c.List the four logical operators that can be directly overloaded for a class (8 marks)