

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)
 - (i) Composition
 - (ii) Abstraction
 - (iii) Information hiding
- c. List five (5) examples of methods (5 marks)
- 4a. What is the full meaning of the following acronyms: (2 marks each)
 - (i) ADT
 - (ii) OOD
 - (iii) OOP
 - (iv) JVM
 - (v) 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)