



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS**  
**MARCH/APRIL 2016 EXAMINATION**

**SCHOOL OF SCIENCE AND TECHNOLOGY**

**COURSE CODE:** CIT734  
**COURSE TITLE:** OBJECT ORIENTED TECHNOLOGY

**Time:** 3 HOURS

**INSTRUCTION:** *Answer any five questions out of Seven*

1. (a) Briefly explain the concept of Object-Oriented Programming (OOP).  
(b) Distinguish between class and object.  
(c) Briefly explain what a method is and list 4 of its components.
2. (a) Distinguish between Abstraction and Encapsulation  
(b) Briefly explain what inheritance is using an example to illustrate.  
(c) Explain the concept of polymorphism.
3. (a) Explain the role of algorithm in developing a program.  
(b) Describe three types of programming techniques other than OOP.  
(c) List the main advantages of object-oriented programming.
4. (a) Write down the main phases of Software Engineering.  
(b) Describe five desirable qualities of a Software product.  
(c) Distinguish between Data abstraction and Modularity
5. (a) Explain clearly what the Waterfall model of the Software Development Life Cycle (SDLC) is.  
(b) Briefly describe what programme documentation is and list three baseline specifications.  
(c) Describe the role of requirement analysis and specification in a software development project.
6. (a) Explain clearly the Non-Formal View of Object Oriented Design (OOD).  
(b) Write down four characteristics of Non-formal OOD  
(c) Mention four advantages of OOD solutions over other Structured Analysis methods.
- 7 (a) Briefly, describe Booch's approach to Object Oriented Analysis and Design (OOAD)  
(b) Compare ANY 4 OOAD methodologies in terms of Proprietary nature, Type, Scope, Strength and Primary Applications/ Market.  
(c) Write down four guidelines for identifying potential classes in a software development process.