# NATIONAL OPEN UNIVERSITY OF NIGERIA
# 14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
## SEPTEMBER/OCTOBER 2015 EXAMINATION

## SCHOOL OF SCIENCE AND TECHNOLOGY

**COURSE CODE:** **CIT 734**

**COURSE TITLE:** **OBJECT ORIENTEDTECHNOLOGY**

**INSTRUCTION:** ***Answer any five questions out ofSeven***
**Time:3HOURS**

1. (a)Writeabriefnoteontheconceptof Object-OrientedProgramming(OOP).
   (b) Distinguish between **class** and**object**.
   (c) Briefly describe what a **method** is mentioning 4 of itscomponents.

2. (a) Define thefollowing:
   i) **Abstraction**
   ii) **Encapsulation**
   (b) Briefly explain what **inheritance** is using an examp e toillustrate.
   (c) Explain the concept of**polymorphism**.

3. (a) Briefly explain the role of algorithm in developing aprogram.
   (b) Describe three types of programming techniques other thanOOP.
   (c) List the advantages of object-oriented programming over the other three referred toabove.

4. (a) Mention the salient phases of SoftwareEngineering.
   (b) Briefly describe five desirable qualities of a Softwareproduct.
   (c) Write a brief note on each of thefollowing:
   i. **Dataabstraction**
   ii. **Modularity**

5. (a) Using a suitable sketch describe the **Waterfall** model of the Software Development LifeCycle(SDLC).
   (b) Write a brief note on programme**documentation** isting three baselinespecifications.
   (c) Briefly explain the role of **requirement analysis and specification** in a softwaredevelopmentproject.

6. (a) Briefly describe **the Non-Formal View** of Object Oriented De ign(OOD).
   (b) Describe **four** characteristics of Non-formalOOD
   (c) Mention four advantages of OOD solutions in comparison with other Structured AnalysisandDesignmethodologies.

7 (a) Briefly, describe the salient features of Booch's approach to Object Oriented AnalysisandDesign (OOAD)
   (b) Compare ANY 4 OOAD methodologies in terms ofProprietaryand Primary Applications/Market. ature, Type, Scope,Strength

(c) Briefly describe four guidelines for identifying potential classes in a softwaredevelopmentprocess.