NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91 CADASTRAL ZONE, NNAMDI AZIKWE EXPRESSWAY, JABI, ABUJA
FACULTY OF SCIENCES
DEPARTMENT OF COMPUTER SCIENCE
2021_2 EXAMINATIONS

COURSE CODE: CIT734
COURSE TITLE: OBJECT-ORIENTED TECHNOLOGY
CREDIT: 3 UNITS
TIME ALLOWED: 2½ HOURS
INSTRUCTIONS: ANSWER QUESTION 1 AND ANY OTHER FOUR (4) OTHER
**   QUESTIONS**

Q1   a. Why does the object-oriented philosophy use methods defined inside classes; What
        could be the advantage   (4 marks)

        b. Explain the following terms
                 (i) Operator Overloading (3 marks)
                 (ii) Static Polymorphism   (3 marks)
                 (iii) Multiple Inheritance (3 marks)
        c. What are three distinguishing features of the Java programming language (3 marks)

        d. Distinguish between public, private and protected elements in OOP   (6 marks)
22 marks

Q2   a. List the three types of relationships of classes   (3 marks)

        b. Briefly explain the following programming techniques
                 (i) Unstructured Programming   (3 marks)
                 (ii) Procedural Programming   (3 marks)
                 (iii)Modular programming   (3 marks)

12 marks

Q3.   a. Briefly explain three (3) elements in the documentation of a software product
                                                                          (6 marks)

b. List and describe three Software Engineering phases   (6 marks)

Q4.   a. List six (6) basic software engineering principles   (6 marks)
        b. Discuss three quality indicators of software products.   (6 marks)

Q5. a. Discuss the life-Cycle Views of Object-Oriented Design   (4 marks)
    b. Outline four (4) OOAD methodologies   (4 marks)
    c. Briefly explain the concept of Modularity in software engineering   (4 marks)

Q6. a. In C++ Write the code that declares a class called Person with these data members:
firsname, lastname, and DOB   (3 marks)
        Write your own constructor and destructor for the class   (3 marks)
        Use the right access modifiers for the members   (3 marks)

 b. In declaring a class discuss why it is not advisable to make all data members public?
                                                                 (3 marks)