

## NATIONAL OPEN UNIVERSITY OF NIGERIA PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI-ABUJA FACULTY OF SCIENCES DEPARTMENT OF COMPUTER SCIENCE 2024 I EXAMINATION.

: CIT 834 COURSE CODE

: OBJECT-ORIENTED PROGRAMMING USING C# COURSE TITLE

: 3 CREDIT UNIT

TIME ALLOWED : 21/4 HOURS

: Answer Question 1 and any other Three Questions INSTRUCTION

- a) Enumerate some of the cross-language technologies present in the FCL (Framework Class Library) [4
- b) Enumerate the procedure for creating a string variable. [4 marks]
- c) List four advantages of employing method overloading [4 marks]
- d) State the 5 primary arithmetic operators and their corresponding symbols. [5 marks]
- e) Give A Brief Overview of String Variables/4 marks/.
- f) What role does the Main method serve in a Windows Application? [4 marks].

2

- a) Explain the object life cycle within an object-oriented program. [3 marks].
- b) Describe the components of an object-oriented program and the mechanism by which objects communicate with each other. [4 marks].
- c) Who was involved in the creation of Java, and what was their initial goal? [4 marks].
- d) What is the official release date of Java, and what were its initial implementations? [4 marks].

3

- a) write short note on message passing [4 marks].
- b) write short note on C++ language/3 marks/.
- c) state why JIT compiler is important in C# programming/4 marks/.
- d) Provide an overview of the features and description of FCL Libraries/4 marks/.

4

- a) In C#, what is the method for representing text when utilizing round brackets? [4 marks].
- b) What are the primary approaches for adding C# classes to applications? [3 marks].
- e) What is the function of the Main method in a Windows Application? [4 marks].
- d) Outline the steps involved in Saving Hello.es File [4 marks].

5

- a) Enumerate the domains where Object-oriented programming finds its application/4 marks/.
- b) list six examples of .NET languages. [4 marks]
- c) why is C# Console Application needed /3 marks/
- d) briefly explain the different types of inheritance/4 murks/

- a) How does Object-Oriented Programming (OOP) intend to address problems and challenges? [4 marks]
- b) Elaborate on the functionality and behavior of the MessageBox.Show() method. [3 marks]
- c) Highlight on the steps in Running C# Programmes [4 marks]
- d) Explain what a C# indexer is, and provide a detailed explanation along with its syntax.