



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKWE EXPRESSWAY, JABI, ABUJA
FACULTY OF SCIENCE
2020 EXAMINATION

COURSE CODE: CIT834

COURSE TITLE: OBJECT ORIENTED PROGRAMMING USING C#

CREDIT: 3 UNITS

TIME ALLOWED: 2½ HOURS

INSTRUCTION: ANSWER QUESTION ONE (1) AND ANY OTHER FOUR (4) QUESTIONS

- 1 (a) Analyze the benefits of Object Oriented Programming [6 marks]
(b) In the process of creating an object show the reason why garbage collection is essential [4 marks]
(c) Write the syntax for creating a method [4 marks]
(d) State the importance of methods in C# and give the syntax of its creation {4 Marks]
(e) Demonstrate with example how parameters are being passed and received by a method [4 marks]
- 2(a) Declare three (3) methods name; RegisterCourse, TakeExam, and GetResults with no parameters and return no value under a class named student . [8 marks]
(b) Refer to 2(a) above Call the method with the student named “Peter” with the following arguments assuming he registered 2 courses, take exams on those two courses and had 60 and 57 respectively as a result. [4 marks]
- 3(a) Write a C# program to display the text “ NOUN is a citadel of learning” using the WriteLine method. [4marks]
(b) Show how to access properties of instantiated objects [4marks]
(c) Identify the relationship between a class and an object (explain with examples) [4 marks]
- 4(a) Name 5 common FCL libraries with their descriptions [5 marks]
(b) Outline the steps taken to add c# class using solution explorer [5 marks]
(c) Give 2 steps of using the static property [2 marks]
- 5 (a) Outline the procedure to set up a development workstation to use C# [6]
(b) Identify a general form of a class definition for a class named “payment” and declare 4 instance variables name; basicpay, houseallowance, transallowance and tax. [6 marks]
- 6(a) Show how a static method is declared with a formula to calculate the area of a rectangle, Use value of your choice to call the method. [8 marks]
(b) Discuss the concept of garbage collection [4 marks]