

NATIONAL OPEN UNIVERSITY OF NIGERIA, PLOT 91 CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI – ABUJA FACULTY OF SCIENCES

JULY 2017 EXAMINATION

COURSE CODE: CIT 351 COURSE CREDIT: 2

COURSE TITLE: C# PROGRAMMING_

TIME ALLOWED: 2 Hours

INSTRUCTION: Answer question 1 and any other three (3) questions

QUESTIONS

1a. In view of the fact that you have completed the course in C# Programming, a beginner has just approached you for guidance. Write down the rules you would recommend that the learner adheres to while coding in C#.

(12 marks)

1b.Within the popular contexts of boxing and unboxing, how would you convert an integer of value type to a reference type in C# programming? (4 marks)

1c.Use a simple C# program to illustrate your answer for 1b. (7 marks)

1d.What is the significance of using the correct conventions when naming objects? (2 marks)

[Total = 25 marks]

2a. Write down the class of operator for the following operators:

	1	0 1	
i. <u>++</u>			(1 mark)
ii. %			(1 mark)
iii. <u>!</u>			(1 mark)
iv. <u>+</u>			(1 mark)
v. <u>=</u>			(1 mark)
vi. <u>&</u>			(1 mark)
vii. ^			(1 mark)
viii. <u>= =</u>			(1 mark)

2b. State the standard syntax for declaring a variable in C#.

(2 marks).

2c. C# is often described as being a 'strongly typed language'. Explain briefly. (2 marks)

2d. Name the three (3) permissible forms of comments allowed in C#. (3 marks)

[Total = 15 marks]

3a. Assuming you are required to build a C# application on a laptop running Windows, state the minimal requirements to be met prior to building this application.

(10 marks).

- 3b.Write down the command for building a console application named **NOUN.cs** within the hard drive. (2 marks).
- 3c. Give a concise description of the concept of case-sensitivity in C# programming language. (3 marks)

[Total = 15 marks]

- 4a. Outline the procedure for building and running a Graphic User Interface application with its source code written in C# (8 marks)
- 4b. Describe the concept of Finalizer within the context of C# classes (2 marks)
- 4c. Generally, VisualStudio.NET is regarded as an Integrated Development Environment. State five (5) good reasons to support this statement. (5 marks)

[Total = 15 marks]

5a. Give a concise description of the following C# Primitives:

i. Char	(1 mark)
ii. Int64	(1 mark)
iii. SByte	(1 mark)
iv. String	(1 mark)
v. Obiect	(1 mark)

- 5b. Write down five (5) reasons why **'Statements'** are considered to be critical in C# Programming. (5 marks)
- 5c. List three (3) core tasks that can be performed in a C# project within the VisualStudio.NET setting. (3 marks)
- 5d. Write down any two common forms of Static properties in C# Programming. (2 marks)

[Total = 15 marks]