



*(Knowledge for Development)*

## **KIBABII UNIVERSITY COLLEGE**

**A CONSTITUENT COLLEGE OF**

**MASINDE MULIRO UNIVERSITY OF**

**SCIENCE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS**

**2014/2015 ACADEMIC YEAR**

**FOURTH YEAR SECOND SEMESTER**

**MAIN EXAMINATION**

**FOR THE DEGREE OF BSC COMPUTER SCIENCE**

**COURSE CODE: CSC 463E**

**COURSE TITLE: PROGRAMMING WITH C #**

**DATE: 4<sup>TH</sup> MAY, 2015**

**TIME: 3.00-5.00PM**

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### **INSTRUCTIONS TO CANDIDATES**

Answer Question One in Section A and Any other **TWO** (2) Questions in Section B

**TIME: 2 Hours**

## INSTRUCTIONS

### Question one

- a) Define a data type giving examples [6 marks]
- b) Show how a method is declared in C# [2 marks]
- c) What is a variable scoping? [4 marks]
- d) Distinguish between **The is operator** and **The as operator** [2 marks]
- e) Give examples of Arrays useful properties and methods [6 marks]
- f) Write a C# code to demonstrate how to create a list
- g) Give two methods of C# for ensuring that variables are initialized before use [4 marks]

### Section B (Answer any two questions)

#### Question two

- a) What are the rules governing implicit conversions as used in C#? [3 marks]
- b) A reference type contains a pointer to another memory location that holds the data. Give some reference types [4 marks]
- c) What does the following do in C# in regard to file Input and output? [8 marks]
  - i. Get Parent
  - ii. Move
  - iii. GetCurrentDirectory
  - iv. SetCurrentDirectory

#### Question three

- a) What are the restrictions of GOTO statement as used in C# [3 marks]
- b) Write C# program to illustrate the difference between value and reference parameters [12 marks]

#### Question four

- a) What are the characteristics of exceptions? [8 marks]
- b) Write a Generic Structure of C# Program [7 marks]

#### Question five

- a) What is a function member as used in C# [4 marks]
- b) What are the advantages of constants in C# [3 marks]
- c) Describe what data members are as seen in class members [8 marks]