



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
INFORMATION SYSTEMS**

4th YEAR 1st SEMESTER 2015/2016 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: IIS 3314

COURSE TITLE: PROGRAMMING IN .NET

EXAM VENUE: STREAM: ICT

DATE: EXAM SESSION:

TIME: 2.00 HOURS

INSTRUCTIONS:

- 1. Answer Question 1 (Compulsory) and ANY other two questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

QUESTION ONE 30 marks

- a) Explain the components of the IDE (Integrated Development Environment) in visual programming.NET (5 MARKS)
- b) What is meant by an object? Write a simple program to demonstrate how a class is defined and declared (5 MARKS)
- c) Describe the essential features of object oriented programming paradigm (5 MARKS)
- d) Compare radio button and option button controls with simple visual .Net program (5 MARKS)
- e) Differentiate between Subroutines and Functions (5 MARKS)
- f) By giving a simple program syntax and code, explain how if statement is used in visual.Net programming. (5 MARKS)

QUESTION TWO 20 MARKS

- a) Write down the codes for Add new, Delete, update, Move to next record, Go to Previous record, go to first record and go to last record using Data Access Object(DAO) or ActiveX data object(ADO) on a data base application
(10 MARKS)
- b) The .NET strategy extends the concept of software reuse to the Internet, allowing programmers to concentrate on their specialties without having to implement every component of every application, explain some of the most common importance of .NET framework. (10 marks)

QUESTION THREE 20 MARKS

- a) Write a .Net program to determine the least value among the three variables x, y and z, if y and x are assigned to different integer values by the user, and the value of z is entered at run time. Find also the average value of the three variables. (10 MARKS)
- c) Compare MsgBox and inputBox controls with a simple program (10 MARKS)

QUESTION FOUR 20 MARKS

- a) By using array techniques, develop a simple student information program, the program should allow the user to enter student's information's such as student name, student registration number, student department and amount of school fees paid through an input box and storing the information entered into list boxes, write codes for each control. (10 MARKS)
- b) Write a simple .Net program that captures the value of a and b variables from the input device and perform simple arithmetic operation such as (addition, subtraction, multiplication and division) (10 MARKS)

QUESTION FIVE 20 MARKS

- a) Class Exception of namespace System is the base class of the .NET Framework
Exception hierarchy. Identify and discuss the most common important derived classes of Exception (10 MARKS)
- b) Differentiate between implicit declaration and explicit declaration of variables with examples .Net programs (10 MARKS)