# Riara University

## Riara School of Business
*Nurturing business innovators*

### MAY - AUGUST TRIMESTER, 2015 EXAMINATIONS
### DAY PROGRAMME
### EXAMINATION FOR DIPLOMA IN BUSINESS INFORMATION TECHNOLOGY

### BDT 010 BASIC CONCEPTS IN COMPUTER PROGRAMMING

**DATE:**                                                                 **TIME: 2 HOURS**

**INSTRUCTIONS**
i)      **Answer question one and any other two**
ii)     **Marks allocated to each question are shown at the end of the question**
iii)    **Arrange your work neatly and indicate the questions answered in the**
        **Examination booklet**

## QUESTION ONE: COMPULSORY (30 MARKS)

**a)**   List and briefly describe any five data types supported by C programming language

**(10 marks)**

**b)** List and describe the three levels of programming languages.

(**6 Marks**)

**c)** Give four examples of arithmetic operators in C

**(4 marks)**

**d)** With the aid of an example, write the general syntax of declaring a variable and assigning
values to the declared variable                                         **(6 marks)**

**e)** Highlight any four features of C programming language              **(4 marks)**

## QUESTION TWO

**a)** Write a C program that prompts the user to enter three numbers; computes the sum and displays the sum result on the screen.

**(10 marks)**

**b)** Explain the purpose of the functions as used in C program. **(2 marks)**

**c)** Explain using examples the difference between

    i. User defined functions

    ii. Library functions **(8 marks)**

## QUESTION THREE

a) Identify the errors in the program shown below:-

```
#include<stdio.h>
void Main()
int xnumber,number 2;
printf("enter the first number/n");
scanf("%f",&xnumber);
printf("enter the second number\n");
scan("%d",&number2);
printf("the answer is %d",sum);
}
```

**(6 marks)**

b) Differentiate between:-

    i.    Structures & Arrays

    ii.   Source code & object code

    iii.  Structure & union

    iv.  Compiler & interpreter **(8 marks)**

**c)** Write a C program that calculates area of a triangle **(6 marks)**

## QUESTION FOUR

a) Using an example, illustrate how a one dimensional array is declared in C language

**(6 marks)**

b) Define the term pseudocode as used in programming. **(2 marks)**

c) Write a pseudo code description of a program that reads two numbers, calculates the average of the entered numbers and prints the average results

**(6 marks)**

d) Define the following terms as used in structured programming:-

    i. Local variable

    ii. Global Variable

    iii. Programming language

    iv. Machine code

    v. Function

    vi. array

**(6 marks)**