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**University Examinations 2015/2016**

STAGE TWO EXAMINATION FOR

DIPLOMA IN INFORMATION TECHNOLOGY

**CIT 2151: FUNDAMENTAL OF COMPUTER PROGRAMMING**

**DATE: AUGUST 2016 TIME: 1 ½ HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two***questions.

**QUESTION ONE (30 MAKS)**

1. Differentiate the following as used in computer programming languages. (4 marks)
2. Module and function
3. Identifier and keyword
4. State the FOUR rules for naming variables (2 marks)
5. List four characteristics of a good Algorithm (4 marks)
6. Describe three characteristics of programming languages. (6 marks)
7. Write a C program to accept a number input by the user and checks whether it is ODD or EVEN.

Use if …else statement. (5 marks)

1. Draw a flowchart to represent the logic of the program in e(i) above. (3 marks)
2. Briefly describe the steps involved in executing a C program. (4 marks)
3. Find errors if any in the following C program (2 marks)

#include<stdio.h>Void main() { Print (“Hello C);}

**QUESTION TWO (20 MARKS)**

1. Define constant and state the types of constants as used in C programming language.

(4 marks)

1. Explain three types of operators as used in C programming language (6 marks)
2. Write a for statement to print each of the following sequences of integer. (6 marks)
3. 2,4,6,8,10
4. 20,15,10,5,0
5. -4,-2,0,2,4
6. Distinguish between high level programming language and machine level programming language (4 marks)

**QUESTION THREE (20 MARKS)**

1. Describe two programming methods (4 marks)
2. C is a case sensitive and a free format programming language. Explain. (4 marks)
3. Using an example show how a variable can be used in a program (2 marks)
4. What is an array? Declare a two dimensional array called student. (5 marks)
5. Write a C program to print the sum of all odd integer numbers between 1 and 50. Use do while loop. (5 marks)

**QUESTION FOUR (20 MARKS)**

1. Describe any two repetitive structures used in programming. (4 marks)
2. Write a function that receive two numbers as argument and returns the value of their product. (6 marks)
3. Study the following sample segment of codes and answer the question that follow:

Int a=5, sum=10

While (a>=0)

{

Printf(“\n a is % d”,a);

Sum=Sum+a;

a=a-1;}

Printf(“\n The sum is %d,sum);

1. Re-write the above segment of code using the do……………while loop. (6 marks)
2. Write the output produced by the above segment of code if embedded in a computer C Program. (4 marks)