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**GARISSA UNIVERSITY**

**UNIVERSITY EXAMINATION 2019/2020 ACADEMIC YEAR TWO**

**SECOND SEMESTER EXAMINATION**

**SCHOOL OF BUSINESS AND ECONOMICS**

**FOR THE DEGREE OF BACHELOR OF BUSINESS MANAGEMENT**

**COURSE CODE: BBM 220**

**COURSE TITLE: INTRODUCTION TO COMPUTER PROGRAMMING**

**EXAMINATION DURATION: 2 HOURS**

**DATE: 16/12/2020 TIME: 09.00-11.00 AM**

**INSTRUCTION TO CANDIDATES**

* **The examination has FIVE (5) questions**
* **Question ONE (1) is COMPULSORY**
* **Choose any other TWO (2) questions from the remaining FOUR (4) questions**
* **Use sketch diagrams to illustrate your answer whenever necessary**
* **Do not carry mobile phones or any other written materials in examination room**
* **Do not write on this paper**

**This paper consists of THREE (3) printed pages *please turn over***

**QUESTION ONE (COMPULSORY)**

1. Differentiate between machine language and low level language **[2 marks]**
2. Distinguish between procedural and visual programming **[4 marks]**
3. A student would like to write a program that could compute and display the average of ten integers entered through the keyboard one at a time. Use a flow chart to design the program **[4 marks]**
4. Assuming C programming language, evaluate the expression;

 Z=a+b mod c\*(d^2)

 Given that a=10, b=23, c=7andd=5. **[5 marks]**

1. Write a program that prompt the user to enter the height and base of triangle. Compute and display the area . The output should be in the format shown below **[10 marks]**

 RECTANGLE

 height =

 base =

 Its area is

 Its base is

**QUESTION TWO**

1. Explain two types of errors that may be encountered during program execution. **[4 marks]**
2. The following are identifiers used in C programming language during program writing.
3. myval, const, integer and switch. Citing a reason in each case, state whether these identifiers are valid or not. **[5 marks]**
4. Write a program in C programming language that could generate random numbers between 0 and 1.

**QUESTION THREE**

1. Distinguish between register and static storages as used in C programming language. **[4 marks]**
2. Write a program in C programming language that would prompt a user to enter an integer. The program should then check whether the integer entered is a prime number and output the result **[6 marks]**
3. Draw a flowchart that shows how to solve a quadratic equation **[5 marks]**

**QUESTION FOUR**

1. Differentiate between low level languages from machine language. **[4 marks]**
2. Describe three types of operators used in C programming language. **[6 marks]**
3. Outline two uses of comments in C programming language **[5 marks]**

**QUESTION FIVE**

1. Write a program in C to compute the minimum number among three inputted integers **[10 marks]**
2. The following is a segment of a C program created by a student. Use it to answer the question that follows

 main ()

(

int I;

for (I=1; I less than=50; I++)

if ("I% d ", I)/n;

)

Write the output generated when the program is corrected and executed **[5 marks]**

**QUESTION SIX**

1. Outline two reasons why program documentation is important. **[2 marks]**
2. Explain three types of program testing. **[6 marks]**
3. Write a C program code that would prompt the user to enter two integer values. The program should then compute the product and the sum of the two numbers and display the results **[6 marks]**