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**GARISSA UNIVERSITY**

**UNIVERSITY EXAMINATION 2020/2021 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 C- PROGRAMMING**

**EXAMINATION DURATION: 2 HOURS**

**DATE: 04/04/2021 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 TWO (2) printed pages *please turn over***

**QUESTION ONE (COMPULSORY)**

1. Differentiate between machine language from low level language (4 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 (6 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. (6 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

 TRIANGLE

 height =

 base =

 Its area is

 Its base is (10 marks)

**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. (8 marks)
4. Write a program in C programming language that could calculate the average of x=23.4 y=67 z=23.8. Display your answer. (8 marks)

**QUESTION THREE**

1. Computer software consists of three major types of programs: state and explain giving examples of each. (10 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 (4 marks)

**QUESTION FOUR**

1. Differentiate a program and an algorithm. (4 marks)
2. The program development process can be viewed in a number of steps. State and explain each of them. (10 marks)
3. Outline two uses of comments in C programming language and explain the two types of comments (6 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)

1. Outline two reasons why program documentation is important. (5 marks)