**GARISSA UNIVERSITY**

**END OF SEMESTER EXAMS**

**PROGRAMMING IN C**

**QUESTION ONE 30 MARKS**

1. Define the following terms 8 marks
2. Variable
3. Compiler
4. Interpreter
5. Function
6. Briefly explain the difference between call by value and call by reference 4 marks
7. Write a C program to prompt user to enter two integers, multiply and display result to the user 5 marks
8. Draw flow chart for if statement and for loop 6 marks
9. How are variables declared? 2 marks
10. Using a diagram illustrate how arrays are indexed differentiate between index and the actual value 5 marks

**QUESTION TWO 20 MARKS**

1. Using a decision structure of your choice write a **SIMPLE** program to check if a student has passed or failed 7 marks
2. With an aid of a diagram explain how a compiler works 8 marks
3. What are the advantages of compiler over interpreter 3 marks
4. What is an array 2 marks

**QUESTION THREE 20 MARKS**

1. Write an array program that lists numbers from 100-110 8 marks
2. Using a loop of your choice write a program that lists number from 0-9. 8 marks
3. Draw a flow for switch case statement 4 marks

**QUESTION FOUR 20 MARKS**

1. Differentiate the following terms: 12 marks
2. Compiler vs assembler
3. Interpreter vs compiler
4. Assembler vs compiler
5. Interpreter vs Assembler
6. Using functions write a program to add to integers and display the result to the user. 8 marks