



## GARISSA UNIVERSITY

UNIVERSITY EXAMINATION **2017/2018** ACADEMIC YEAR **ONE**  
**THIRD** SEMESTER EXAMINATION

SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCE  
FOR THE DIPLOMA IN INFORMATION TECHNOLOGY

**COURSE CODE: DIT 008**

**COURSE TITLE: INTRODUCTION TO PROGRAMMING USING C**

**EXAMINATION DURATION: 2 HOURS**

**DATE: 07/08/18**

**TIME: 2.00-4.00 PM**

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### INSTRUCTION TO CANDIDATES

- The examination has **SIX (6)** questions
- Question **ONE (1)** is **COMPULSORY**
- Choose any other **THREE (3)** questions from the remaining **FIVE (5)** 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)

- a. Define the following:
- I. What is a variable [3 Marks]
  - II. What are the features of low level language [7 Marks]
  - III. System Software. [3 Marks]
  - IV. What is a class [3 Marks]
  - V. What is an object [3 Marks]
- b. What is an operator? Describe different types of operators that are available in C language. [6 Marks]

### QUESTION TWO.

- a. Write a program to check whether a number is even or odd. [9 Marks]
- b. What is the precedence of comma operator compared with other C operators [6 Marks]

### QUESTION THREE.

- a. Draw a flow chart to print all integers from 1 to 1000 [9Marks]
- b. Give three methods by which a program can repeat itself [6 Marks]

### QUESTION FOUR.

- a. List different types of decision control statement. Explain the type of if statements and give one [10 Marks]
- b. Write a program to check whether a number is even or odd [5 Marks]

### QUESTION FIVE.

- a. Write a program to find sum of digits of a number [9 Marks]
- b. Differentiate between digital and analog computers. [6 Marks]

### QUESTION SIX.

- a. Difference between while and do while loop. [8 Marks]
- b. With the aid of a diagram, describe how computer units interact. [7 Marks]

