



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

**UNIVERSITY EXAMINATION FOR:**

**BTAP/SEP2015/J-FT/BTRE/SEP2015/J-FT**

**EIT 4253/EIT 4131: INTRODUCTION TO COMPUTER PROGRAMMING**

**SPECIAL/SUPPLEMENTARY EXAMINATION**

**SERIES: SEPTEMBER 2018**

**TIME: 2HOURS**

**DATE: Sep 2018**

## Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

**Do not write on the question paper.**

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## Question ONE

- (a) Describe the four basic data types in C programming language (4 Marks)
- (b) Briefly describe basic structure of a C Program (4 Mark)
- (c) List down four relational operators (4 marks)
- (d) Distinguish between a low level language and a high level language (8 marks)
- (e) Write a C program that allows a user to input a value then determines if the value is an odd or even number. (4 Marks)
- (f) Explain the importance of functions in a program. (4 Marks)

## Question TWO

- a) Discuss three errors encountered during programming. (6 Marks)
- b) Distinguish between scanf() and printf() functions (4 Marks)
- c) Discuss three types of loops used in C programming. (6 Marks)
- d) Write a function printing the words "This is the end o the program". (4 Marks)

## Question THREE

- a) Explain how to declare an array giving an example. (4 Marks)
- (a) What will be the output of the following segment when executed  
int a = 20, b = 10;  
if (a>b)  
  
{  
  
If (b>5)  
  
}  
  
printf("%d", b);  
  
else  
  
printf("%d", a);  
  
}  
  
(6 Marks)
- b) Explain two ways how you can add comments to a c program. (4 Marks)
- (a) State three advantages of using functions in a program (6 Marks)

## Question FOUR

a) Explain the relationship between variables and data types.

(4 Marks)

b) Write down characters that will do the following with a simple example in each.

- i. Create a horizontal tab
- ii. Break a line
- iii. Carriage return

(6 Marks)

c) Using an array, write a program to display marks for 4 students that have been initialized.

(6 Marks)

d) Differentiate between a pseudo code and an algorithm.

(4 Marks)

## Question FIVE

a) Discuss any two categories of operators supported in c.

(4 Marks)

b) Write a C program that converts a character from a lowercase to uppercase

(6 marks)

c) Explain the if else control structure and write a C program to illustrate the it

(10 marks)