ALOPE UNIVERSITY COLLEGE

... *Bastion of Knowledge*....

OFFICE OF THE DEPUTY PRINCIPAL

ACADEMICS, RESEARCH AND STUDENTS' AFFAIRS

UNIVERSITY EXAMINATIONS

2019 /2020 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER REGULAR EXAMINATION

FOR THE DEGREE OF BACHELOR SCIENCE IN COMPUTER SCIENCE/BACHELOR OF BUSINESS MANAGEMENT

COURSE CODE: BBM 210/COM 201
COURSE TITLE: COMPUTER PROGRAMMING

DATE: 11/12/2019   **TIME: 2.00-5.00PM**

INSTRUCTION TO CANDIDATES

- **SEE INSIDE**

THIS PAPER CONSISTS OF 4 PRINTED PAGES   PLEASE TURN OVER

QUESTION ONE

a) Describe the steps that are followed when executing a C program.   (5marks)

b) The basic structure of C program comprises of the different elements. Discuss these elements.

(5marks)

i. Preprocessor statements

ii. Main()

iii. A pair of curl brace { }

iv. Declaration

v. User defined functions

c) Explain any five characteristics of a C program.   (5marks)

d) What are the rules for constructing variable names?   (4marks)

e) Explain the meaning of Integrated Development Environments (IDE)   (2marks)

f) Give two disadvantages of the machine and assembly languages.   (2marks)

g) Write a simple C program to calculate the average of two numbers.   (5marks)

h) Define pointers as used in programming   (2marks)

QUESTION TWO

a) Discuss the If……..Else statement. Give the syntax.   (5marks)

b) Explain the aim of the code below and give the output it will produce. What will make this

code not to execute.   (5marks)

 c) Describe the steps used in a computer program development life cycle   (6 marks)

d) Discuss call by reference and call by value.   (4marks)

QUESTION THREE

a) Explain the meaning of the following programming terms:

i. **Local variables.**   **(2marks)**

ii. Global variables.   (2marks)

iii. Static variables.   (2marks)

b) State three categories under which functions can be categorized   (3marks)

c) What is an array?   (2marks)

d) Loop statements are important in any program when one wants to repeat statements again and again. Draw a while loop data flow diagram in C programming (5marks)

e) Explain giving examples any three escape sequence characters in C language (4marks)

QUESTION FOUR

a) Explain four advantages of functions in c programming language   (5marks)

b) Outline the components of a computer system.   (5marks)

c) Differentiate the following data types in C language   (5marks)

d) Differentiate compilers and interpreters.   (4marks)

e) What is a computer program?   (1mark).

QUESTION FIVE

a)Discuss six guiding principles of designing a good computer programme   (6 marks)

b) Distinguish between system programming and application programming.   (4 marks

c) Clasify with examples ,computer programming languages into first to fifth languages.

(10marks)