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OFFICE OF THE DEPUTY PRINCIPAL

ACADEMICS, RESEARCH AND STUDENTS' AFFAIRS

UNIVERSITY EXAMINATIONS

2018 /2019 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER REGULAR EXAMINATION

FOR THE DEGREE OF ARTS IN ECONOMICS

COURSE CODE: ECO 211

COURSE TITLE: INTRODUCTION TO COMPUTER PROGRAMMING 1.

DATE:17/12/2018 **TIME: 2.00-5.00PM**

INSTRUCTION TO CANDIDATES

- **SEE INSIDE**

THIS PAPER CONSISTS OF 4 PRINTED PAGES **PLEASE TURN OVER**

ECO 211: COMPUTER PROGRAMMING1

STREAM: BA.ECON **DURATION: 3 HOURS**

INSTRUCTIONS TO CANDIDATES

i. ***Answer Question ONE and any other TWO questions***

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

Question One

i) Define an operating system. (2 Marks)

ii) Differentiate between a general purpose and a specific purpose programming language with two examples each. (4 Marks)

b) Describe the drawbacks of Machine Language. (4 Marks)

c) Differentiate between the following:

i. Loader and Linker. (2 Marks)

ii. Assembler and Compiler. (2 Marks)

d) Write and explain the output of the following C program. (4 Marks)

```
#include
 main()
{
int a=6, b=10;
printf("a=%d\n,a++);
printf("b=%d\n,b++);

}
```

e) List any ten (10) reserved words in C. (5 Marks)

f) Describe the variable naming conventions in C language. (4 Marks)

g) Write C language program to add two numbers x and y and store the result at z. (3 Marks)

Question Two

a) State and explain the steps followed when executing a C program. (4 Marks)

b)Write a program in C that accepts two numbers and checks whether they are equal or not. (4 Marks)

c) Describe the "nested-if statement". (4 Marks)

d) Differentiate between the "while" and "do-while" statements. (4 Marks)

e) Explain two types of errors in programming. (4 Marks)

Question Three

a)Define the following terms:

i)Programming. (1 mark)

ii. Flowchart (1 Mark)

iii. Variable (1 Mark)

iv. Debugging. (1 Mark)

v. Error (1 Mark)

b) Write a C programme that calculates the area of a square shape **(5**Marks)

c) Describe the basic structure of a C program. (5 Marks)

d) Differentiate between constants and variables in programming. (2 Marks)

e) Explain how values are assigned to variables. (3 Marks)

Question Four

a)Using "for loop" write a C program to output the following.

value of a: 10;value of a: 11;value of a: 12;value of a: 13;value of a: 14;value of a: 15;value of a: 16;value of a: 17;value of a: 18;value of a: 19 (10 marks)

b) Write a C program to multiply two numbers. (4 marks)

c) State three characteristics of a good algorithm (3 marks

d) Draw a flowchart to represent the logic of the program in (b) above. (3 marks)

Question Five

a) Write a C function that calculates the area of a square shape (4 Marks)

b) Write and explain the output of the following C program. (4 Marks)

```
#include
 main()
{
int a=6, b=10;
```

```
printf("a=%d\n,a++);
printf("b=%d\n,b++);
}
```

c) Differentiate between relational, logical, and Assignment operators used in C language? (6marks)

d) Explain type any three types of identifiers in C language (6marks)