

COM 201



OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, STUDENT AFFAIRS AND RESEARCH

UNIVERSITY EXAMINATIONS

2010 /2021 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER REGULAR EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE (APPLIED STATISTICS WITH
COMPUTING)

COURSE CODE: COM 201

COURSE TITLE: COMPUTER APPLICATIONS AND PROGRAMMING
METHODS

DATE: 9/02/2021

TIME: 1400 – 1700 HRS

INSTRUCTION TO CANDIDATES

- SEE INSIDE

THIS PAPER CONSISTS OF 4 PRINTED PAGES

PLEASE TURN OVER

REGULAR-MAIN EXAM

COM 201: COMPUTER APPLICATIONS AND PROGRAMMING METHODS

STREAM: ASC

DURATION: 3 Hours

INSTRUCTION TO CANDIDATES

Answer ALL questions from section A and any THREE from section B.

SECTION A [24 MARKS]. ANSWER ALL QUESTIONS.

QUESTION ONE [12 Marks]

a) Define the following terms used in programming [4 Marks]

- i) Compiler
- ii) Interpreter
- iii) Assembler
- iv) Linker

b) C programming language is used for developing system applications that forms a major portion of operating systems. Name any 3 examples of C applications. [3 Marks]

c) Define clearly five basic operations that a computer system (irrespective of their shape & size) can perform [5 Marks]

QUESTION TWO [12 Marks]

- a) Differentiate between a program and a language in programming [2 Marks]
- b) Differentiate between Structure oriented and Object-oriented languages [2 Marks]
- c) Explain (giving examples) the classification of computer languages [4 Marks]
- d) Write a C program that outputs "Hello COM201 Nerds" [4 Marks]

SECTION B [36 Marks] Answer any THREE questions]

QUESTION THREE [12 Marks]

a) Define any 2 elements of C programming [2 marks]

b) Explain variable declaration and initialization of variables. [4 Marks]

c) Consider a C program below

```
#include <stdio.h>
int main(){
printf("Hello C Language");
return 0;
```

}

Write and explain the flow of the C Program.

[6 Marks]

QUESTION FOUR [12 Marks]

a) Let a=15 and b=10 obtain the value of each increment and decrement operators below (consider sequence of operation)

a++

a--

++b

--b

[4 Marks]

b) Write a C program to print a message if negative number is entered.

[8 Marks]

QUESTION FIVE [12 Marks]

a) Write a C program to perform division of 2 numbers

[4 Marks]

b) Write a C program to print series from 12 to 1 using nested loops. Write all possible outputs

[8 Marks]

QUESTION SIX [12 MARKS]

a) Write a C program to check whether the given number is even or odd

[4 Marks]

b) Write a C program to check for the relation between 2 numbers

[4 marks]

b) c) Write a C program to find the reverse of a number

[4 marks]

QUESTION SEVEN [12 MARKS]

a) Write a C program to check whether a given year is leap year or no

[5 Marks]

b) Write a C Program to count the no of digits in a number

[7 marks]
