

LIICTA MOCK 2023 – O/L COMPUTER SCIENCE 3

REPUBLIQUE DU CAMEROUN
Paix – Travail – Patrie

MINISTERE DES ENSEIGNEMENTS
SECONDAIRES

DELEGATION REGIONALE DU LITORALE

INSPECTION REGIONALE DE PEDAGOGIE



REPUBLIC OF CAMEROON
Peace – Work - Fatherland

MINISTRY OF SECONDARY EDUCATION

REGIONAL DELGATION FOR THE LITTORAL

REGIONAL INSPECTORATE OF PEDAGOGY

GENERAL CERTIFICATE OF EDUCATION MOCK EXAMINATION

ORDINARY LEVEL

SUBJECT TITLE CODE	COMPUTER SCIENCE CSC 0595	MARCH-APRIL 2023
PAPER NUMBER	3	

Time Allowed: Two and a half hours

INSTRUCTIONS TO CANDIDATES:

- Answer **ALL** questions.
- Fill the blank spaces provided in ink
- Create a Folder on the Desktop with your Full Name. Save **ALL** your work in this Folder.

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TASK 1 (20 Marks)

Motherboard

The motherboard is a larger electronic board that is used to connect the power supply to various other electronic parts, and to hold these parts in place on the computer. The computer's memory (RAM, describe below) and processor are attached to the motherboard. Also found on the motherboard is the BIOS (Basic input and output system) chip that is responsible for some fundamental operations of the computer, such as linking hardware and software. The motherboard also contains a small battery (that look like a watch battery) and the chip that work with it to store the system time and some other computer settings.

Algorithm structure

1. Sequence Algorithmic Structure:

In a sequence structure, an action, or event, leads to the next ordered action in a predefined order. The sequence can contain any number of actions, but no actions can be skipped in the sequence.

2. Choice Algorithmic Structure:

A choice algorithm is used to make choices depending on information. Algorithm can be made smarter by using IF, THEN, and ELSE functions. Choice algorithm is also called a selection of decision algorithm

3. Iteration Algorithmic Structure:

It is one in which there is a repetition of a process in order to generate a sequence of outcome. Each repetition of the process is a single iteration, and the outcome of each iteration is the starting point of the next iteration.

Figure 1

a) State the name of the word processor including the version that is installed on your computer

_____ (2mks)

b) Launch the word processor application and verify that the page orientation is portrait and the page size is A4. Type the text given in Figure 1. Save your work as TASK 1. (8mks)

c) Design the document as follows:

- i) Font type Georgia (1mk)
- ii) All heading font size 24 (1mk)
- iii) Center align paragraph one (1mk)
- iv) Line Spacing of the whole document to double lines (1mk)
- v) Insert the image of the Motherboard provided in the Candidate folder at the end of paragraph one (2mks)

d) List the Four paragraph alignments in MS Word

(4mks)

TASK 2 (20 Marks)

1) The Spreadsheet below is used to track the performance scores for a student.

	A	B	C	D	E	F
1	FIRST SEQUENCE EVALUATION REPORT SHEET					
2	SUBJECT	SEQUENCE 1	SEQUENCE 2	TOTAL	AVERAGE	REMARK
3	BIOLOGY	10	05			
4	MATHS	12	13			
5	COMPUTER	14	09			
6	HISTORY	02	08			
7	LOGIC	19	19			
8	ICT	12	09			

- Import the data above in Sheet 1 of the spreadsheet install, respecting all formatting. Save your work as TASK 2. (3mks)
- Merge the cells in the range A1 to F1 and insert the word "FIRST SEQUENCE EVALUATION REPORT SHEET" in bold. (1mk)
- Use spreadsheet formulae to look for the TOTAL and the AVERAGE for **BIOLOGY**. Write the formulae used: TOTAL_____ AVERAGE_____ (2mks)
- Use fill handle to get the Totals and Averages for the rest of the subjects. (2mks)
- Under remarks, use a function to grade the averages such that 9.99 and above =PASS, Below 10=FAILED. (2mks)

2) SPAR Super Market operates two categories of tax schemes: VAT and Council Tax. The company has a policy to encourage customers by introducing a discount for purchases above 100,000 FCFA. For every purchase, customers pay tax (VAT and Council TAX (CT) and the discount is calculated from the total purchase made by that customer.

SPAR SPECIAL SALE REPORT FOR JUNE 2020							
TAX	VAT	5%			DISCOUNT RATE	10%	
	CT	3%			SUMMARY PAY		
S/N	CUSTOMER	TOTAL PURCHASE	VAT	CT	TOTAL AMT	DISCOUNT	NET PAY
1	PAUL DAVIS	250,000					
2	MARY DANIS	170,000					
3	PAUL DICE	750,000					

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4	IYA JONES	158,000					
5	JUDE TABE	210,000					
TOTALS							

- Import the data above in sheet 2, respecting all formatting (2mks)
- Compute the VAT, CT, TOTAL AMT, DISCOUNT and NET PAY for PAUL DAVIS. (4mks)
- Use Fill handle to complete the entries for the other customers (2mks)
- Generate a Pie chart which displays the CUSTOMERS and their NET PAY. (2mks)

TASK 3 (20 Marks)

This section is intended to test the students' ability to build and manage databases and to run simple programs in C or Pascal.

A. DATABASE DEVELOPMENT

The student table in a school admission database is shown below.

STUDENT							
Student ID	First Name	Last Name	Age	Gender	Address	Tel	E-mail
12345	PAUL	MIKE	20	Male	DOUALA	674575620	paul@ymail.com
12346	MIKE	BERNT	30	Male	BUEA	574563829	mike@gmail.com
12347	JOY	FLOUR	25	Female	TIKO	987654323	joy@yahoo.com
12476	NTHI	JUDE	18	Male	BUEA	689523514	jude@gmail.com

- State the name of the database management system installed on your computer (1mk)
- Create a Database and save as TASK 3. Design the table above using appropriate data types (2mks)
- In the table below, identify appropriate data types for all the attributes (2mks)

ATTRIBUTE	DATATYPE
Student ID	
First Name	
Last Name	
Age	
Gender	
Address	
Tel	
E-mail	

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- d) Develop the database table. Populate the table with data as shown above, using a Form. (2mks)
 e) Create a Query that will display ALL male students in the database. Screen shot the query and save as Query 1. (2mks)
 f) Create a report that displays all your students. Screen shot the report and save as Report 1 (1mk)

B. PROGRAMMING

The C and Pascal programs below perform the same task. Select any one of them and answer the questions that follow:

```

Program Numbers;
Var x, y, result: integer;
Begin
    writeln;
    writeln('Enter a number 1:');
    readln(n1);
    writeln('Enter a number 2:');
    readln(n2);
    if x>y then
        result:=x+y
    else
        result:=x*Y;
    writeln('Answer is: ',result);
    readln;
end.
    
```

PASCAL CODE

```

#include<stdio.h>
Int main(void)
{
    Int x,y,result;
    printf("\n Enter a Number 1:");
    scanf("%d", &x);
    printf("\n Enter a Number 2:")
    scanf("%d", &y);
    if(x>y)
        result=x+y;
    else
        result=x*Y;
    printf("\n Answer is:%d", result);
    return 0;
}
    
```

C CODE

- a) Launch either C or Pascal program development environment, and key in the corresponding program. Compile the program, if any errors, keep correcting and compiling the program until all errors are corrected. Save your work as TASK 3. (3 marks)
- b) Run the program and enter 10 and 15 respectively when prompted for number 1 and number 2. Write the output observed in the space below: (1mk)
-
- c) Run the program again but this time, enter 15 and 10 respectively when prompted for number 1 and number 2. Write the output in the space provide. (1mk)

d) Explain what the program is designed to do
(2mks)

e) List all the variables in the program
(1mk)

f) Identify the control structures used in the program

_____ (1mk)

g) Screen shot the program running and save as TASK 3.

(1mk)