REGISTRATION CENTRE NUMBER		CENTRE NAME	
CANDIDATE'S FULL NAMES			
CANDIDATE IDENTIFICATION NUMBER		SUBJECT CODE **0796**	PAPER NUMBER **3**

FOR OFFICIAL USE ONLY (Candidate Random CODE): ▶	

CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD
ADVANCED LEVEL EXAMINATION

SUBJECT TITLE **INFORMATION & COMMUNICATION TECHNOLOGIES**	SUBJECT CODE **0796**	PAPER NUMBER **3**
	EXAMINATION DATE: **JUNE** 2020	

TWO HOURS
DAY 2

Enter the information required in the shaded boxes.
Do not write in pencil.

*Your are reminded of the necessity for good English and orderly presentation in your answer. Your results must be recorded in the spaces provided in this question booklet. Candidates must allow for themselves enough time to complete and check their work where these are required. The supervisor will guide you on how to save your files but usually you will be expected to save all your work in one folder named **Candidate folder** that will be created in your desktop.*

*When an imperative programming language is require to write program code, either Standard |**ISO**|Pascal or |**ANSI**|C programming language may be used.*

You should ensure all your work is collected and printed before leaving the examination room. All printed work should be inserted in this booklet and well stapled.

CAREFULLY HANDLE EQUIPMENT PUT AT YOUR DISPOSAL to avoid accidents that may lead to a disaster or system failure. Report any case of system or device malfunction to your supervisor.

Answer ALL TASKS.

FOR EXAMINER'S USE ONLY	
Marked by:	***SCORE***
Signature: .... Date:	
Checked by:	
Signature: .... Date:	

....

TASK A (SPREADSHEET: 19 MARKS)

Open the **Business** workbook in the candidate folder. This workbook contains three worksheets, Sales, OldSales and Summary.

Questions 1 to 10 are based on the **Sales** sheet.

1. Change the font type of the first row (showing SN, NAME, 5 % Discount. . .) to ALGERIAN.

(1 mark)

2. Insert cell border in the range A1:G25. **(2 marks)**

3. Adjust the Name field width to 138 pixels. **(1 mark)**

4. Insert a formula in the *5 % Discount* field to calculate the discount for each item bought. This discount is 5 % of the product or Unit Price and Quantity. **(2 marks)** Write down the formula in cell C4.

C4: _____

5. Insert a formula in the *Payable Total* field to calculate the total price for each sale. The total is calculated following the algorithm below:

  Start

    Multiply Unit Price by Quantity to get total price
    Subtract the 5 % Discount from the total price above

  Stop. **(2 marks)**

Write down the formula to calculate the Payable Total in F12 in the line below.

F12: _____

6. Calculate the total 5 % Discount and total of the *Payable Total* in row 25. **(1 mark)** Write down the formula in cell C25.

C25: _____

7. Set the font of row 25 to bold and size 14. **(1 mark)**

Ensure that you have written down the formulae in the cells in questions 4, 5 and 6 above before attempting the questions that follow.

8. Format the numbers in the range C2:F25 to thousand separator without decimal place.

(1 mark)

9. Rearrange the fields (columns) in this sheet to occur in the order SN, Name, Item, Unit Price, Quantity, 5 % Discount and Payable Total. **(2 marks)**

10. Insert a fill colour of light blue to the cells that make up the field names. **(1 mark)**

The next exercises are based on the ***OldSales*** and ***Summary*** sheets.

11. Sort in ascending order the table in **OldSales** by items. **(1 mark)**

12. In C2 of the Summary sheet, type a formula to link C2 to a cell in OldSales that contains the unit price of spanners. Do similarly for the cells in the range C3:C9. **(1 mark)** Write down the formula in cell C2 in the line below.

C2: _____

13. In the Summary sheet, type a formula in D2 that will add the total quantity of spanners sold. Do similarly for the cells in the range D3:D9. **(3 marks)** Write down the formula in cell D2 in the line below.

D2: _____

Print the three sheets of this workbook: Sales, OldSales and Summary.

TASK B (DATABASE: 21 MARKS)

This exercise will lead to the normalization of the General Sales table given below.

The complete implementation of the database is to have three tables. Two of the tables have been created in a database named **Equipment** found in the Candidate folder.

The General Sales table below shows the purchase made by eight customers from an equipment shop for a week.

Table A: General Sales

No	Names	Items	Unit Price	Quantity	Line - Total
1	Gabriel Kome	Gallon	550	400	220,000
2	Makia Betoke	Spanner	900	230	207,000
3	Gabriel Kome	Cutlass	2,700	336	907,200
4	Samson Takang	Bulb	1,500	220	330,000
5	Hadison Okie	Spanner	900	11	9,900
6	Etame Juliet	Bulb	1,500	18	27,000
7	Gabriel Kome	Spanner	900	19	17,100
8	Ngwa Kingsley	Cutlass	2,700	10	27,000
9	Samson Takang	Spanner	900	11	9,900
10	Bekolo Jean	Gallon	550	12	6,600
11	Makia Betoke	Bulb	1,500	15	22,500
12	Etame Juliet	Floor rag	1,300	15	19,500
13	Gabriel Kome	Cable	2,700	15	40,500
14	Ngwa Kingsley	Padlock	850	18	15,300
15	Bekolo Jean	Bulb	1,500	12	18,000
16	Gabriel Kome	Padlock	850	14	11,900
17	Etame Juliet	Cable	2,700	18	48,600
18	Ngwa Kingsley	Bulb	1,500	16	24,000
19	Makoge Kingsley	Hand saw	3,500	17	59,500
20	Samson Takang	Spanner	900	10	9,000

1. Does the table contain an entire primary key? _____
Explain your answer _____ **(2 marks)**

2. The General Sales table is not normalised. Give two explanations for this, in the spaces below.
(2 marks)

Reason 1. _____

Reason 2. _____

3. Give a reason why the table is in 1NF. **(1 mark)**

_____

Open the **Equipment** database in your Candidate folder.
In an attempt to normalise the database, the table above was split into three tables. Two of the tables are

Table 1: Items, which identifies the items

Table 2: Buyers, which identifies the buyers.

The records of the tables are given below.

Table 1: Items

ItemNo	Item	Unit Price
T1	Bulb	1,500
T2	Cable	2,700
T3	Cutlass	2,700
T4	Spanner	900
T5	Gallon	550
T6	Floor rag	1,300
T7	Hand saw	3,500
T8	Padlock	850

Table 2: Buyers

SN	Names
1	Gabriel Kome
2	Makia Betoke
3	Samson Takang
4	Hadison Okie
5	Makoge Kingsley
6	Etame Juliet
7	Ngwa Kingsley
8	Bekolo Jean

The third table, named **Sales** is designed to relate the two tables above.

4. Complete the table below to show the properties of the **Sales** table. Note that the field *Line - Total* is a calculated field and should not be included in the **Sales** table: **(3 marks)**

Field Name	Data type

5. Design a simple Entity-Relationship (E-R) diagram of the database in the space below.

(2 marks)

6. Create the **Sales** table in the database and create the relationship according to the E-R Diagram. **(3 marks)**

7. Populate the Sales table by obtaining data from the General Sales table. **(3 marks)**

8. Create a query that reproduces the **General Sales** table (with fields, SN, Names, Items, Unit Price, Quantity, Line - Total). Take note that **Line - Total** is a calculated field. Save the query as **General Sales**. **(3 marks)**
Write, in the line below, the formula in the calculated field found in the query.

_____

9. Capture the screen of your query in **8.** above and paste in a new document file named **Query Screen** and print. **(2 marks)**

Print the Sales table and the General Sales query.