

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 2018	

**TWO HOURS
DAY 2**

Enter the information required in the shaded boxes.

Do not write in pencil.

You 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.

Meet us at www.alstug.com

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 ALL 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.

----- **TURN OVER**

FOR EXAMINERS' USE ONLY	
Marked by:.....	SCORE
Signature: Date:	
Checked by:.....	
Signature: Date:	

Ga/0796/3/C/G2

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TASK A (Database: 19 marks)

You are required to update a database for a school library to store books. You are given a database named *Library Books* found in the candidate folder. The database already contains one table named *Books*. You will be expected to create one other table (*BookDetails*) to have two tables in this database. After creating the table, you will be expected to create a relationship between the two tables and make a query and a report. Implement in your database whatever you are asked to write down in this task.

1. Open a database called *Library Books* found in your candidate folder on the Desktop.
2. Open the table called *Books* and use it to complete the table below.

Field Name	Data Type	Field size
Book_ID	Number	Long Integer
Title		
Subject		
NoOfCopies		

(3 marks)

3. Create another table in *Library Books* called *BookDetails* with the following records.

ID	Book ID	Version	Author	ISBN
1	1	1	Peter J	413S
2	1	4	Andrew N	513S
3	2	4	Mbah B	613S
4	2	3	Eto C	713S
5	4	2	Francis N	913S
6	5	1	Fred T	813S

(4 marks)

(1 mark)

4. State the data type for ISBN *Numbers*

5. Identify the primary key of the table *BookDetails*

(2 marks)

6. Establish the relationship between the *Books* and the *BookDetails* tables.
Sketch the diagram of your relationship in the space below.

(4 marks)

7. Establish a query saved as *BookQuery* to display all the books in the library that have more than one copies remaining (your query should display the BookID, Subject and NoOfCopies). From your query fill the table below.

Field				
Table				
Sort				
Criteria				
Show				
Or				

(5 marks)

Print *BookQuery* and *BookDetails*.

TASK B (Spreadsheet 16 marks)

This task will require a workbook named THRIFT found in the candidate folder. The spreadsheet shows a thrift and loan table of a small group of people. You are called to summarise the records at the end of the year by using spreadsheet formulae to make calculations.

1. Open the THRIFT spreadsheet. (1 mark)
2. Insert border in the area containing the table. (2 marks)
3. Insert a formula in the F column to calculate the difference which is calculated by subtracting the loan from the savings. Write the formula you have in F5 in the line below.

F5 (2 marks)

4. Insert a formula in the G column to calculate the simple interest which is 5 percent of the loan. Write the formula you have in G2 in the line below.

G2 (3 marks)

5. The bonus is calculated on two factors; those whose savings are greater than 25000 and loan less than the savings get 10 percent of the difference (column F) as bonus else they get zero bonus. Write the formula you will use to calculate the bonus for Moto John in I2.

I2 (4 marks)

6. Insert a formula in column J to calculate the balance for all the members. Write the formula you will use to calculate the balance for Moto John in J2. (Use the fact that a positive sign on the field name indicates benefits to the member while a negative sign indicates a deduction to calculate the balance). Write the formula you will use to calculate the bonus for Moto John in J2.

J2 (2 marks)

7. Insert a total for all the columns along row 10. Write the formula in J10 in the line below.

J10 (2 marks)

Task C (PROGRAMMING 15 marks)

In this task you are expected to type **either** the Pascal code **or** the C code using the appropriate programming environment. After typing the code you will have to compile and run the code. You will be given some input to test the program and record the output

Pascal code	C code
<pre> PROGRAM PAYMENT (INPUT, OUTPUT); VAR Name: String; Pay, HoursWorked, Payrate, Overtime, OverTimePay: Real; Begin Writeln('Enter the name of worker'); Read(Name); Writeln('Enter number of hours worked'); Readln (HoursWorked); Writeln('Enter the amount paid per hour'); Readln(PayRate); if (HoursWorked<=72) then Pay:= HoursWorked*PayRate Else Begin Overtime:= HoursWorked - 72; OverTimePay:=OverTime*PayRate*1.5; Pay:=72*PayRate + OverTimePay; End; Writeln ('The total payment is: ', Pay); Readln; End.</pre>	<pre> #include <stdio.h> int main () { char Name [20]; float Pay, HoursWorked, PayRate, OverTime, OverTimePay; printf("Enter the name of worker\n"); scanf("%c", &Name); printf("Enter Hour the number of hours worked"); scanf("%f", &HoursWorked); printf("Enter the amount paid per hour") scanf("%f", &PayRate); if (HoursWorked<=72) Pay=HoursWorked*PayRate else { OverTime=HoursWorked-72; OverTimePay=OverTime*PayRate*1.5; Pay=72*PayRate + OverTimePay; } Printf("The total payment is: %f", Pay); return 0; }</pre>

Questions

1. State the compiler you will use for this program. (1 mark)
2. Type the program in the compiler chosen above, compile and run the program with the given test data below
 (a) Name=Fanta
 HoursWorked=90
 PayRate=1500
 Meet us at www.alstug.com
 Copy from your program the line that gives the final outcome.

 (6 marks)
3. State two declared variables in the code: (2 marks)
4. State two reserved words used in the code:..... (2 marks)
5. State two control structures that are used in the code.
 (2 marks)
6. Print the code (2 marks)