

0796/P3/2025

ICT A/ATVE Level

**SOUTH WEST REGIONAL MOCK EXAMINATION  
GENERAL / TECHNICAL AND VOCATIONAL EDUCATION**

**THE TEACHERS' RESOURCE UNIT (TRU)**

Cellule d'appui à l'action Pédagogique

**IN COLLABORATION WITH**

En collaboration avec

**THE REGIONAL INSPECTORATES OF PEDAGOGY AND**

**THE SUBJECT TEACHERS' ASSOCIATIONS (STA)**

**MONDAY, 31<sup>st</sup> MARCH 2025**

**ATVE/ ADVANCED LEVEL**

Subject Title	<b>INFORMATION AND COMMUNICATION TECHNOLOGIES</b>
Subject Code Number	<b>0796</b>
Paper Number	<b>Paper 3</b>

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**TWO HOURS**

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**INSTRUCTIONS TO CANDIDATES:**

**Task 1 and Task 2 is compulsory. Answer one question in Task 3.**

*For your guidance, the approximate mark for each part of a question is indicated in brackets.*

*Great importance is attached to accuracy, layout and labeling of drawing generated outputs.*

*You are reminded of the necessity for good English and orderly presentation of your answers.*

*Write algorithms in your answer booklet provided. Also record in your booklet any information requested or that you believe would make it easier to understand how you carried out your tasks or answered questions*

*You are expected to print out a single copy of relevant fragments of your program at different times. **Please notify the instructor of any required print out that was not done!***

*When an imperative programming language is required to write program code, either **Standard [ISO] Pascal** or the **[ANSI] C** programming language maybe used.*

*If need be, invigilators will assist you in recording details of intermediate work carried out on the computer.*

*Where information is provided as soft copy, notify the instructor if it is not found in your machine or has not been made available to you.*

*You are advised to read carefully through the question paper, before you begin your answers.*

**Task 1: Spreadsheet (21 marks)**

Redeemed medical hospital decided to automate its payroll system to ensure workers are paid what they rightfully deserve. Payment of workers is based on the basic salary and the amount of extra time put at work. Payment criteria are found in a workbook found in your Candidate folder Named Redeemed Hospital. The workbook has two sheets: **payment and rates.**

Open the workbook in your candidate folder

EmployeeCode	NAME	RANKS	OVERTIME HOUR	BASIC SALARY	OVERTIME SALARY	TOTAL	TAX
101	Long John	MD					
102	Enongene Simon	NURSE					
	Anafor Lucas	LABTECH					
	Akime Patrice	NURSE					
	Neba Roseline	NURSE					
	Tankor Pascal	LABTECH					
	Ntui Anabel	MD					
	Julius Ambe	NURSE					
	Ekane Philip	LABTECH					
	Celine Mbua	MD					
	Clara Buka	NURSE					
		Rank	total				
		MD					
		LABTECH					
		NURSE					

- (i) Employee Code has been assigned to the first two workers. Use autofill to get the codes for all the other workers (A5 to A13) (1 mark)
- (ii) Put a thick outside border on cell A1 to H16 (1 mark)
- (iii) Merge cell A1 to H1, change the font size to 16, font type: Arial black , bold and underline (2 marks)
- (iv) In cell E3, compute the Basic salary for Long John. (Use the rates in the rates sheet). Use autofill to get the Salary for all the other workers. Write the formula in cell E5 (3 marks)
- (v) In cell E3, compute the overtime rate. It is calculated by multiplying the overtime hour by overtime rate found in the rates table). Use auto fill to compute for the rest. write down the formula to calculate the overtime payment to Akime Patrice. (3 marks)
- (vi) In cell J3, Compute the total amount to be paid to long John by adding his overtime pay to basic salary. Use auto fill to compute that of the other workers. Write the formula used. Write the formula you used in cell J3 (2 marks)
- (vii) In H3, calculate the amount to be paid for taxes. It is calculated by multiplying the total pay by tax rate (found in the rate sheet). use auto fill to get that of the other workers. Write the formula used in H7 (2 marks)
- (viii) In cell I3, calculate the net payment by deducting tax rate of 10%. write the formula found in I4. (2 marks)
- (ix) Format cell E3:I13 with a currency of your choice (2 marks)
- (x) In cell E17, E18 and E19, use a conditional function to calculate all the salaries paid to MD, LABTECH and NURSE respectively. Write down the formula you have used:
  - E17 \_\_\_\_\_ (1 mark)
  - E18 \_\_\_\_\_ (1 mark)
  - E19 \_\_\_\_\_ (1 mark)

Print a copy of your work.

**Task 2: Database ( 21 marks).**

This task is based on the information found in a workbook named hospital and the doctor table below. The work book contains four sheets: patient, patient\_admission, ward, doctor\_speciality.

Doctor_id	Doctor_name	Speciality_id
DOC001	Ibrahim Lontum	SP001
DOC002	Mughe Arnold	SP002
DOC003	Damaris Tantoh	SP003
DOC004	Vincely Gibri	SP001
DOC005	Mukube Precious	SP002

- (i) Using A DBMS of your choice, create a database called Hospital\_management. (1 mark)
- (ii) Import all the Four tables found in the hospital sheet ( patient, ward, doctor\_speciality, patient\_admission) make a screen shot of the navigation pane (4 marks)
- (iii) Create the Doctor table above and populate it. Print the table. (3 marks)
- (iv) Study the tables. In your answer booklet draw an entity relationship diagram showing clearly the relationships between the entities. (3 marks)
- (v) Create a query that displays all the patients admitted in the male or female ward. The query should include patients' names, and the name(s) of the doctor(s) that admitted them. Save the query as femalemale. (3 marks)
- (vi) Create another query of patient from Limbe or Buea who were admitted by gynecologist. The query should include the patients' name, address, doctor's name and specialty. Save the query as gynecology admit print the query. (3 marks)
- (vii) Create a report of Query 'femalemale', include all the fields, and save as patient. (2 marks)
- (viii) Create a report of the Ward table. Include all the fields (2 marks)

**Task 3 (8 marks):**

**Programming**

Below is an algorithm that requests the storage capacity of a phone in Gigabyte and converts the result to Megabyte. You are expected to convert the Algorithm to a code in either Pascal or C programming Language.

```

Start
1 Enter the storage capacity of your phone in GB
2 while (Capacity <= 0){
3 Display capacity cannot be less than or equal to 0
4 repeat line 1 }
5 MB = capacity * 1024
Display MB
    
```

After successful debugging,

- (i) Run your program with -3 when prompted for input and write down the result \_\_\_\_\_ (1 mark)
- (ii) Run your program with 3 when prompted for input and write down the result \_\_\_\_\_ (1 mark)
- (iii) State the programming construct used in line 2 of the algorithm? \_\_\_\_\_ (1 mark)
- (iv) Make a screen shot of your code and print. (5 marks)


OR

### Presentation Software

Using any suitable presentation software, design the 4 slides below. All the images you need are found in your candidate folder. The "title and content slide" should be used in slide 2, 3, and 4.

## IT TOOLS USED TO ENHANCE LEARNING

Exploring Technology in Education



*Presented by Fadel Halid*

## INTRODUCTION TO IT TOOLS IN EDUCATION

- **Definition:**  
IT tools are technologies that facilitate learning and improve educational outcomes.
- **Importance:**  
Enhance engagement, accessibility, collaboration, and individualized learning experiences.

Slide 1


### LEARNING MANAGEMENT SYSTEMS (LMS)

#### PERSONALIZED LEARNING:

**Example:** Moodle, Canvas

**Function:**

- Facilitates communication between teachers and students.
- Tracks student progress and performance.



Slide 2

### COLLABORATIVE TOOLS

**Example:**  
Google Workspace (Docs, Sheets, Slides)

**Function:**

- Allows real-time collaboration on documents and projects.
- Supports group work and peer feedback.

Slide 3

Slide 4

You will be evaluated based on the following: Font type used in the titles of all the four slides: "Algerian", sub title: "time New Roman". Layout: title 38, sub titles 32. (2 marks)

Slide 1	Layout: title font size 40 bold and centered, sub titles 32 Insert image named "LT"	2 marks
Slide 3	Layout: title font size 38 bold and centered, sub titles 20 Insert image named "LMS" Insert all bullets	2 marks
Slide 2,4	Layout: title font size 38 bold and centered, sub titles 20	2 marks

OR

### Web design

Using a suitable text editor, design the web page below. Save your work as "task3.html"  
(NB: The options **Specialty** should contain Arts, Science, Commercial and Industrial).

MY ONLINE FORM

File C:/Users/Dell/Fa... Sign In

## REGISTER HERE

Full name:

Sex:  F  M

Date of birth:

Language:  ENGLISH  FRENCH

Contact:

Address:

Specialty: