

NAME \_\_\_\_\_

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CLASS \_\_\_\_\_

# CATHOLIC DIOCESE OF KAKAMEGA EVALUATION TEST JULY/AUGUST EXAM 2025

*Kenya Certificate of Secondary Education*

451/2

COMPUTER STUDIES

Paper 2 (Practical)

JUNE/ JULY 2025

2½ hours.

## **Instructions to candidates**

- a) *Type your name and admission number at the top right hand corner of each printout*
- b) *Write your name and index number on the compact disks*
- c) *Write the name and version of the software used for each question attempted in the answer sheet*
- d) *Passwords **should not be used** while saving in the compact disks*
- e) *Answer **all** the questions*
- f) *All questions carry equal marks*
- g) *All answers must be saved in your compact disks/flash disks*
- h) *Make a printout of the answers on the answer sheets provided*
- i) *Hand in all the printouts and the compact disks.*

## QUESTION ONE

Premier Food Industries Ltd is a leading food processing company in Kenya, manufacturing over 50 different household products including sauces, squashes, juices and jams for the local and regional markets. The company hires personnel on permanent, contract and casual basis. A spreadsheet has been prepared to help compute salaries for its employees.

	A	B	C	D	E	F	G	H	I	J
	Serial No.	Payroll_No.	Employee Name	Terms of Employment	Total Hours Worked	Gross Pay	Income Tax	Net Pay		
1										
2	1	P1001	Sonia Ray	Permanent	160					
3	2	P1002	Wote Baraka	Contract	140					
4	3	P1003	Zahara Victor	Casual	155					
5	4	P1004	Sheldon Harry	Casual	148					
6	5	P1005	Lucky Brook	Permanent	160					
7	6	P1006	Solidad Aisha	Contract	180					
8	7	P1007	Harzel Kamala	Permanent	167					
9	8	P1008	Donald Wafula	Casual	163					
10	9	P1009	Serena Kelvin	Permanent	186					
11					<b>TOTALS</b>					
12	<i>Type</i>	<i>Rate</i>								
13	Permanent	200								
14	Contract	280								
15	Casual	150		Tax Rate	15.20%					

### Required:

- (a) Enter the data in a worksheet so as to appear as shown on the worksheet above. Save your workbook as **PFI\_Payroll**. (13 marks)
- (b) Gross Pay is computed as a product of hours worked and applicable hourly rate based on the type of employment.
- (i). Using IF( ) function, type a formula in **F2** that would return the gross pay for Sonia Ray, using the criteria outlined in cells A13:B15 (3 marks)
- (ii) Apply the formula in b(i) above to the rest of the employees (1 mark)
- (c) Employees who earn above 35,000/= are required to pay income tax computed at **15.20%** of gross income. Use a suitable formula in the range **G2:G10** to return the desired values. (3 marks)
- (d) Use an appropriate formula to calculate Net Pay for all the employees. (2 marks)
- (e) Enter a formula in cell in cell **F11** and apply it to cells **G11** and **H11** to calculate the totals. (2 marks)
- (f) Use a suitable formula in cell **F13** that would return total Gross pay for employees who have been hired under permanent terms. Place an appropriate label in cell **E13**. (3 marks)
- (g) (i) Copy the contents of **Sheet 1** onto **Sheet 2**. Rename sheet 2 as **Formatted** (2 marks)
- (ii) Change the page orientation of **Formatted** to landscape and insert your index number as header at the top left corner. (2 marks)

(h) Using data on **Formatted**;

(i) Create a new row 1 and enter the text “**Premier Payroll for August 2025**” as the title. Merge the cells and centre title across the worksheet headings. Set the title to font size 17, Arial black. (3 marks)

(ii) Format the values in Gross pay, Tax and Net pay columns to two decimal places. Use the thousands comma separator. (2 marks)

(iii) Apply bottom double border on the cells containing totals in row 11 and dotted border to the cells in the range **A1** to **H10**. (2 marks)

(i) Using the updated worksheet in (h) above;

(i) Sort the worksheet list in descending order of employment type and in each category arrange employees in descending order of net pay. (2 marks)

(ii) Filter the worksheet list to display employees hired on either “contract” or “Casual” terms”. Save changes made to the worksheet. (2 marks)

(j) (i) On a separate sheet, create a bar chart based on the filtered worksheet to display Employee’s names, Tax and Net pay. (3 marks)

(ii) Format the chart as follows;

Chart Title : Premier Earnings

X-axis : Amount

Y -axis : Employee Name

(3 marks)

(k) Print;

(i) **Formatted** (1 mark)

(ii) **The Graph.** (1 mark)

## QUESTION TWO

The management of **KAKAMEG HARDWARE** has requested you to design a database management system (DBMS) that can be used to update records of its daily transactions.

### **Required**

- a) Create a relational database called **KAKAMEGA** with the following tables. Determine the appropriate data types for the fields. (6mks)

- a. Customer table.

FIELD NAME	DATA TYPES
CUSTID	AUTONUMBER
CUSTNAME	SHORT TEXT
CITY	SHORT TEXT

- b. Ordertable.

FIELD NAME	DATA TYPES
TRANSID	AUTONUMBER
CUSTID	NUMBER
PRODUCTS	SHORT TEXT
QUANTITY	NUMBER
DATEOFORDER	DATE/TIME

- c. Producttable.

FIELD NAME	DATA TYPES
NAME	SHORT TEXT
PRICEPERITEM	CURRENCY

- b) Determine the primary keys and the foreign keys in the above tables and create relationships among them. (3mks)
- c) For table Order table, field PRODUCTS should look up for its values from table Product table (2mks)
- d) Create a form called **frm product** to enter the following details in the products table. (3mks)

NAME	PRICEPERITEM
Cement	600
Crown paint	1200
Barbed wire	780
Iron sheet	560
Hammer	450
Padlock	500
Pliers	230
Wire mesh	895

- e) Create other forms called **frmcustomers** and **frmorders** to enter the following details in the customers table and orders table respectively. (8mks)

Customertable

CUSTID	CUSTNAME	CITY
1	Joseph Otieno	Nairobi
2	Haman Njoroge	Kiambu
3	Mary Mutua	Machakos
4	Maina Joe	Nairobi

## Ordertable

TRANSID	CUSTID	PRODUCTS	QUANTITY	DATEOFORDER
1	1	Cement	10	2/3/2024
2	2	Cement	12	2/3/2024
3	1	Padlock	5	3/3/2024
4	4	Wire mesh	6	3/3/2024
5	3	Hammer	3	12/3/2024
6	2	Cement	2	12/3/2024
7	1	Iron sheet	20	20/3/2024
8	4	Cement	15	20/3/2024
9	3	Crown paint	8	21/3/2024
10	3	Barbed wire	1	21/3/2024

- f) Create a query called **datequery** to extract all those items bought after 3<sup>rd</sup> of March 2024, displaying the customer name, product name, and date of order fields. (3mks)
- g) Create another query called **Cementquery** to extract all those customers who bought cement in March 2024 and create a field showing how many bags of cement each customer had bought. (3mks)
- h) Create a grouped report per customer called **customerreport** displaying the product, dateoforder, quantity and price. (5mks)
- i) Modify custome rreport by doing the following.
- Create a text box with label **Totalperorder** next to price and write a function to compute **total amount per order**. (3mks)
  - Compute the **subtotal amount each customer has to pay for his orders for the whole month** with a label **subtotal**. (3mks)
  - Compute the **Grand Total** for the sales that KAKAMEGA hardware has made the whole month with a label **Grand Total**. (3mks)
  - Insert a header **KAKAMEGA HARDWARE MARCH SALES** in the report having font size 20 and center it across the page. (3mks)
- j) Print the following. (5mks)
- Customer table, Order table, Product table.
  - Date query, cement query.
  - Customer report.