

NAME	DATE
INDEX NO	CANDIDATE'S SIGNATURE
	SUKELEMO 2022

Kenya Certificate of Secondary Education

451/2 COMPUTER STUDIES PAPER 2 (PRACTICAL) TIME: 2½ HOURS

INSTRUCTIONS TO CANDIDATES

- (a) Type your name and index number at the top right hand corner of each print out
- (b) Write your name and index number on the diskette/CD-R provided
- (c) Write the name and version of software used in each question on the answer sheet
- (d) Answer ALL the questions
- (e) Passwords should not be used while saving in the diskette/CD-R
- (f) All answers MUST be saved in the diskette/CD-R
- (g) Make print out of answers on the answer sheet provided
- (h) This paper consists of 5 printed pages. Candidates should check to ensure that all pages are printed as indicated and no questions are missing

FOR EXAMINER'S USE ONLY.

Question	Candidate's score
1	
2	
Total score	

Question 1

The figure below shows an extract from Muhindi Mbingu secondary school fees income. The data titled 2022 school fee increment shows the percentage increment for the year 2022.

4	Α	В	С	D	E	F	G	н	I	J
1										
2				2021 SCHOOL FEE						
	CLASS	NO. OF	TUITION	LUNCH	UNIFORM	CAUTION	REMEDIAL	BURSARY	TOTAL FEES	
3	CLASS	STUDENTS	FEE	FEE	FEE	FEE	FEE	RECEIVED	PER CLASS	
4	FORM 1A	35	45,000.00	18,000.00	10,000.00	12,000.00	2,000.00	180,000.00		
5	FORM 1B	34	45,000.00	18,000.00	10,000.00	12,000.00	2,000.00	200,000.00		
6	FORM 1C	25	45,000.00	18,000.00	10,000.00	12,000.00	2,000.00	120,000.00		
7	FORM 2A	33	65,000.00	18,000.00	10,000.00	3,000.00	2,400.00	340,000.00		
8	FORM 2B	22	65,000.00	18,000.00	10,000.00	3,000.00	2,400.00	250,000.00		
9	FORM 2C	26	65,000.00	18,000.00	10,000.00	3,000.00	2,400.00	320,500.00		
10	FORM 3A	22	75,000.00	18,000.00	10,000.00	2,000.00	3,000.00	185,600.00		
11	FORM 3B	26	75,000.00	18,000.00	10,000.00	2,000.00	3,000.00	236,000.00		
12	FORM 3C	25	75,000.00	18,000.00	10,000.00	2,000.00	3,000.00	136,350.00		
13	FORM 4A	23	85,000.00	18,000.00	10,000.00	1,000.00	4,500.00	500,000.00		
14	FORM 4B	27	85,000.00	18,000.00	10,000.00	1,000.00	4,500.00	450,000.00		
15	FORM 4C	20	85,000.00	18,000.00	10,000.00	1,000.00	4,500.00	300,500.00		
16										
17										
18										
19		2022 school fees icreament								
		TUITION	LUNCH	UNIFORM	CAUTION	REMEDIAL	BURSARY			
20		FEE	FEE	FEE	FEE	FEE	PAID			
	Icrement in	10%	5%	2%	3%	5%	0%			
21	percentage	1070	370	270	370	370	070			
22										
23										

- a) Create the worksheet as it appears in the figure in a spreadsheet package and save it as **Incomestatement.** (9 marks)
- b) Copy the content of **incomestatement** to a new sheet and name it as **incomestatement1.** (1 mark)
- c) insert column in between the following labels TUITION FEE and UNIFORM FEE, UNIFORM FEE and CAUTION FEE, CAUTION FEE and REMEDIAL FEE, REMEDIAL FEE and BURSARY. Label the new columns using their predecessor column adding the text 'TOTAL' before. (3 mark)
- d) Use a function that references only to cells to calculate:

 TOTAL TUITION FEE for each class not forgetting that the TUITION FEE indicated is for one student. apply the same concept to obtain the totals for other columns.

 (3 marks)
- e) Format the Worksheet as follows:
 - (i) Resize the titles to font size 16 and apply bold. (2 marks)
 - (ii) Apply outline border around data 2021 SCHOOL FEE. (1 mark)
 - (iii) Align to the right all the column headings in the worksheet. (1 mark)
 - (iv)Apply a grey background colour to all column headings. (1 mark)

- f) (i)Copy the content of the current worksheet to a new worksheet and rename the new worksheet **Modified.** (1 mark)
 - (ii) copy the data labeled '2021 SCHOOL FEE' and paste it below the data labeled '2022 school fees increment'. Delete the values of the newly copied work leaving the labels and the data on the columns named CLASS and NO. OF STUDENTS. Change the title to 2022 SCHOOL FEE. (3 mark)
 - (iii) Compute the school fee for the year 2022 using data titled '2022 school fees increment'. use absolute cell referencing to obtain the correct data where necessary.

 (6 marks)
 - (iv) using formulae compute the total fees collected in the year 2022. Clearly indicate the sub totals and finally the grand total. (5 marks)
 - (v) write a function in cell B40 that sums up the bursary in class having more than 25 students only. (3marks|)
- g) Create a well labeled pie chart to compare the total fees per class. (5 marks)
- h) Print the following Worksheets:

(4 marks)

- (i) Incomestatement.
- (ii) incomestatement1.
- (iii) Modified
- (iv) Chart

Question 2

M/s Ann Momanyi, an ICT consultant with Makueni Distributors is in the process of developing a Management Information System (MIS) for the company. Currently, she is designing sales database using three tables namely: - customers, products and transactions. The details for each table are given below:-

Customers	<u>Products</u>	Transactions
Customer ID	Product ID	TransID
CustomerName	ProductDescription	clientName
PostalAddress	Packaging	TransacDate
Town	unitPrice	Product
Phone	Stock	Quantity

Questions

a) Create a database named MIS and in it create three relations.

(12marks)

b) Identify the most appropriate field as the primary key in each table

(3marks)

- c) Establish relationships among the three tables and enforce the referential integrity (6marks)
- d) Create a form for each table. Save the forms as **Customer Form**, **Product Form** and **Transaction Form**.

(9marks)

e) Use the respective forms to enter the following records in each table

(6marks)

CUSTOMER TABLE

CustomerID	Customer Name	Postal Address	Town	Phone			
H001	Andrew Mwove	209	Mutituni	200870			
H002	Erick Onsongo	68	Nyamira	248567			
H003	Brenda Nyabuti	100	Bomet	789678			
H004	Lydiah Winzaa	250	Mwingi	778009			
H005	Jeff Ogero	330	Keroka	666790			
H006	Maureen	550	Kakeani	780906			
	Makuthu						

PRODUCT TABLE

ProductID	Product description	Packaging	Unit price	Stock
AA001	Cooking oil	20kg Gal	16000	80
AA003	Rice	50kg bags	4500	60
AB004	Detergents	5 litres	11000	40
AC006	Fertilizer	50kgs bags	4700	30
AA007	Mineral water	1.5litres	8200	400

TRANSACTION TABLE

CustomerID	Client Name	TranscDate	Products	Quantity
1001	Andrew Mwove	06/04/2007	Cooking oil	6
1002		26/4/2007	Mineral water	8
1003	Erick Onsongo	23/04/2007	Detergents	10
1004		14/4/2007	Cooking oil	12
1005	Maureen	02/05/2007	Rice	4
1006	Makuthu	08/05/2007	Fertilizer	3
1007	Erick Onsongo	16/05/2007	Detergents	25

- e) Create a query that displays the customer Name, Product Description, Quantity, Unit price and calculates field total payable by each customer. Save the query as MISQuery (5marks)
- f) Generate a report from MISQuery. Save the report as MISReport

(4marks)

g) Print the Customers, Products, Transaction table's design, MISQuery and MISReport (5marks)