

NAME..... INDEX NO.....

CANDIDATE'S SIGNATURE..... DATE.....

CLASS

451/2
COMPUTER STUDIES
PAPER 2
(PRACTICAL)
JULY/AUGUST 2014
TIME: 2 ½ HRS

STAREHE GIRLS' CENTRE & SCHOOL ***MOCK***

Kenya Certificate of Secondary Education

Instruction to candidates

- Write your name and Index Number at the top hand corner of each printout
- Write the name and version of the software used for each question attempted in the answer sheet
- Answer ALL questions
- All questions carry equal marks
- Before starting to work on the paper, create a folder and label it with your name and admission number
- Use the folder created to save all your work

This paper consists of 4 printed pages. Candidates should check to ascertain that all papers are printed as indicated and that no questions are missing

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Question One

The following data is an extract of data obtained from Chai company records. Study the data and answer the questions that follow.

AREA	PRODUCER ID	NAME	QUANTITY DELIVERED (KG)	GROSS PAY	TRANSPORT COST	DEDUCTION	NET PAY
101B	115	John Kamau	4562				
79A	145	Mathew B	1254				
79A	012	Kanuga Symon	235				
79A	561	Ann Wangige	8954				
101B	016	Joseph Kaitano	9658				
20Z	123	Namachanja Esther	7895				
20Z	458	Kerobo Betty	456				
101B	654	Flo Ngina	421				
20Z	758	Mary Nguriareng'	7895				

- Enter the data shown above into a spreadsheet giving it an appropriate title centre and bolded across the worksheet. Save the workbook as CHAT 001. And rename the worksheet as June records (10 Marks)
- Copy the data to a new worksheet and add the details of producer James Kirega of area 101B, id 452 with quantity of produce of 2,700kg in an appropriate row. (1 Mark)
- Insert borders after every cell and every row. (2 Marks)
- Use a function to calculate the gross pay for the producer with id number 115 given that the price per KG of the produce is Sh.41 .00 (2 Marks)
- Use the formula for gross pay obtained for producer John Kamau to calculate the gross pay for all the farmers (2 Marks)
- Use if function to calculate transport cost for all the producers given that transport is charged per Kg is as follows (5 Marks)

AREA	Price per kg
101B	5.00
20Z	3.50
79A	4.00

- Insert the value 20% in cell E14. Using absolute cell referencing calculate Deductions given that the deduction is 20% of the cost. (4 Marks)
- Using a function calculate the net pay given that Net pay is Gross pay — deductions and transport cost (4 Marks)
- Format the columns containing currency values to currency with 2 decimal places and prefix Ksh. Rename the worksheet PRODUCE PAY and save it as CHAI 002 (3 Marks)
- Arrange the records in ascending order of the producer id (2 Marks)
- By applying suitable filter condition, display records for all producers except those from area 79A. Save it as CHAT 003 (4 Marks)
- Use subtotals function to calculate subtotals for the quantity delivered, gross pay and net pay from each area. (3 Marks)
- Create an embedded pie chart showing the total quantity of produce delivered for each area the chart should have the following details.)

- i. Chart title Area Total produce delivered
- ii. Legend Position Right
Save it as CHART 1 (5 Marks)
- n) Print CHAT 001, CHAI 002, and CHART 1 in landscape orientation. (3 Marks)

Question Two

- a) Type the following document in a word processor and save it as Simulation (20 Marks)



Meaning

Is a method of approach to problems which involves building a model of the system to be investigated observing the behavior of the system by gathering useful data about the model. It is therefore a “**Try and see what happens**” method which is cheaper than direct experimentation using the real system. In business, the process of experimenting with a model usually consist of inserting different input values and observing the resulting values.

Why use simulation

- Used where analytical techniques are not available or would be very complex. It is used in most queuing systems, inventory control problems, production planning problems, corporate planning etc.
- Simulation often provide an insight into a problem which would be unobtainable by other means.

Variables in a simulation model

- a) Input variables – these are grouped further into;

- i) Controlled input variables

- These are variables which can be controlled by management like reorder level or reorder quantity in a stock control system.

- ii) Non controlled input variables

- They are variables not controlled by management like the demand of goods in a stock control system.

- b) Parameters

- These are input variables which have a constant value and are used to specify the relationship between other variables.

- c) Status variables

These are general circumstances of a system which may affect the output such as times or seasons. For instance demand in a queuing system like supermarket is greatly influenced by the season of the year.

d) Output variables

These are the results of simulation. They arise from the calculations and tests performed in the model using input variables, parameters and status variables.

The following table summarizes the types of simulation variables.

VARIABLES USED IN SIMULATION		
INPUT VARIABLES	Controlled Variables	Examples
		⇒ Reorder ⇒ Reorder quantity
	Non controlled variables	Examples
		⇒ Demand
PARAMETERS	Examples	
	⇒ Cost of stock out	
	Loss of good will	Loss of customers
STATUS VARIABLES		
OUTPUT VARIABLES		

Business models

A model is any representation (physical or abstract) of a real thing, event or circumstances. In business planning, abstract or symbolic models are used and represent reality in numeric, algebraic or graphical form. Another definition for a model is an intelligent representation of reality developed to help forecast what might happen when an existing operation is enlarged or has extra demands made on it.

b) Format all the text in the document as follows;

Font – Arial

Font size – 13pts

(4 Marks)

c) Apply a hanging indent style to the first paragraph and 1.5 lines for line spacing

(4 Marks)

d) Insert a footnote to the word simulation (The heading) as follows;

1. Using models of real objects, events or circumstances to study their behavior

(3 Marks)

e) Adjust page margins of the entire document as follows;

Left – 0.7 inches

Right – 0.5 inches

Top – 0.4 inches

Bottom - 0.4 inches

Also set the paper size to A4

f) Save the document as simulation 2.

(2 Marks)

g) Move all text starting from “variables in a simulation model” to the end of the table from the current document to a new blank document, and save it as model variables.

(7 Marks)

N/B: Don’t save the changes in simulation 2

h) Print simulation 2 and model variables

(4 Marks)

ANSWERS:

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