THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATIONS COUNCIL OF TANZANIA

CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

036/2 INFORMATION AND COMPUTER STUDIES 2

(For Both School and Private Candidates)

Time: 3 Hours **ANSWERS** **Year: 2018**

Instructions

1. This paper consists of three questions

2. Answer two questions.

1. Mbogo Modern Technology Electronics Ltd deals with sales of three types of electronic goods namely Laptop computers, DVD players, and Music systems. Read the information in the table which shows the details of May 2017 sales and answer the questions that follow:

Category Code	Type	Item Description	Unit Price	Unit Sold	Sub-total	Tax	Net Amount
LP 001	Computer	Del-150 GB	1,500,000	20			
LP 002	Computer	Apple-100 GB	2,000,000	10			
MS 012	Music system	Samsung	600,000	25			
MS 013	Music system	Toshiba	800,000	15			
DV 210	DVD	Sony DVD player	300,000	30			
DV 216	DVD	Panasonic DVD player	200,000	12			

Tax rates:
- Computer: 5%
- DVD: 10%
- Music System: 12%

(a) Create a worksheet by using the details given in the table above. Save it as MBOGOTECH.

(b) Use appropriate cell reference to calculate:
(i) The Sub-total which is the product of Unit Price and Unit Sold.
(ii) The TAX is based on the type of item. Use the rates given in the table above to calculate tax payable for each item sold (Hint: Tax = Tax rates x Subtotal).
(iii) The Net Amount which is the Subtotal minus Tax.

(c) On the same worksheet, create a two-dimensional line graph with types of electronic goods in horizontal axis and Unit Price in vertical axis. Save it as Goodsgraph.

(d) On the same worksheet, create a three-dimensional pie chart with labelled data of types of electronic goods against Net amount. Save it as Piegraph.

(e) Copy the worksheet created and paste in sheet2. Sort the worksheet in ascending order according to the Unit Price.

(f) Print your work.

(a) Create a worksheet
1. Open Microsoft Excel and create a new workbook.
2. Create the following columns in the worksheet:
   - Category Code
   - Type

- Item Description
- Unit Price
- Unit Sold
- Sub-total
- Tax
- Net Amount

3. Enter the data provided in the table:
   - For the Tax rates, use:
     - Computer: 5%
     - DVD: 10%
     - Music System: 12%
4. Save the file as "MBOGOTECH."

(b) Calculate values using formulas

1. Sub-total
   Use the formula =E2*F2 (Unit Price x Unit Sold) and drag down to calculate for all rows.
2. Tax
   Tax is calculated based on the item type:
   - For computers: =G2*5%
   - For DVDs: =G2*10%
   - For Music systems: =G2*12%

   Drag the formula down for all rows.
3. Net Amount
   Use the formula =G2-H2 (Sub-total - Tax) and drag down for all rows.

(c) Create a 2D Line Graph

1. Highlight the "Type" and "Unit Price" columns.
2. Go to the "Insert" tab and select "Line Graph."
3. Label the X-axis as "Type of Electronic Goods" and the Y-axis as "Unit Price."
4. Save the graph with the title "Goodsgraph."

(d) Create a 3D Pie Chart

1. Highlight the "Type" and "Net Amount" columns.
2. Go to the "Insert" tab and select "3D Pie Chart."
3. Label the chart title as "Net Amount of Electronic Goods."
4. Save the chart as "Piegraph."

(e) Copy and Sort Worksheet

1. Copy the worksheet by right-clicking on the worksheet tab and selecting "Move or Copy."
2. Create a copy in a new sheet and name it "Sheet2."
3. Sort the data in ascending order based on the "Unit Price" column:
   - Select the "Unit Price" column.
   - Go to the "Data" tab, click "Sort," and select "Ascending Order."

(f) Print the Worksheet
1. Set the print area to include the entire worksheet, line graph, and pie chart.
2. Go to "File" > "Print."
3. Print the worksheet with all charts and data.

2. (a) Use Microsoft Publisher to design a Form Four Secondary School Leaving Certificate as given in the following snapshot:

Certificate descriptions:
- Set font face type Perpetua, font size 20, and font color black.
- Use any border of your choice.

(i) Save your work with the name Certificate as a publisher file and also JPEG image.
(ii) Print your work.

(b) (i) By using Microsoft Word program, type the texts as given below and answer the questions that follow:

1.0 Introduction
There has always been a need to come up with better writing tools to improve on efficiency and legibility of the written work. These tools include manual typewriters, electronic typewriters and now electronic word processors.

2.0 Electronic Word Processors
Electronic word processor is application software that enables the user to create, edit and print text-rich documents. Examples of common word processors include:
(a) Microsoft Word
(b) Corel WordPerfect
(c) Apple

(ii) Save your work as "Word Processor".
(iii) Run the Spell Checker and correct all mistakes.
(iv) Change the line spacing of the whole document to 1.5.
(v) Apply a hanging indentation to 2-inch mark in the introduction.
(vi) Format all texts to font face Comic Sans MS with font size 11.5 pt.
(vii) Apply a 6pt width page border setting to the document. The page border must be a Box type.
(viii) Type your Examination Number by using font style Heading 2 as the heading of your document.
(ix) Print your work.

Solution for Form Four Secondary School Leaving Certificate and Word Document Tasks

(a) Use Microsoft Publisher to Design the Certificate

1. Open Microsoft Publisher
   - Open Microsoft Publisher and create a blank document.

2. Set Page Design
   - Go to the "Page Design" tab and set the page orientation to landscape.
   - Choose any border style by using the "Borders and Accents" option under the "Insert" tab.

3. Create Certificate Header
   - Insert a text box and type: FORM FOUR SECONDARY SCHOOL LEAVING CERTIFICATE.
   - Center the text and set the font type to Perpetua, font size to 20, and font color to black.
   - Bold the text and add underlines where required.

4. Add Certificate Content
   - Below the header, insert another text box and type:
     This is to certify that MASINDE P MAKUKE
     has completed form four
     at MKONO SECONDARY SCHOOL in November 2014.
   - Center-align the text, set the font to Perpetua, font size to 20, and font color to black.

5. Add Footer Details
   - Insert text boxes at the bottom of the page for "HEADMASTER" and "OFFICIAL SEAL." Align them to the left and right, respectively.

6. Insert Border
   - Use the "Page Design" or "Insert" tab to add a decorative border around the entire page.

7. Save the Certificate
   - Save the file with the name Certificate as a publisher file.
   - Save a copy as a JPEG image using the "Save As" option.

8. Print the Certificate
   - Print the certificate by selecting "File" > "Print" and choosing the appropriate printer.

(b) Create the Word Document

Step 1: Type the Texts
1. Open Microsoft Word and type the following text:

   1.0 Introduction

There has always been a need to come up with better writing tools to improve on efficiency and legibility of the written work. These tools include manual typewriters, electronic typewriters and now electronic word processors.

2.0 Electronic Word Processors

Electronic word processor is application software that enables the user to create, edit and print text-rich documents. Examples of common word processors include:

(a) Microsoft Word
(b) Corel WordPerfect
(c) Apple

Step 2: Formatting the Document
1. Save the document as Word Processor.
2. Run Spell Check
   - Go to the "Review" tab and select "Spelling & Grammar." Correct any mistakes.
3. Set Line Spacing
   - Highlight the entire text, go to the "Paragraph" menu, and set the line spacing to 1.5.
4. Apply Hanging Indentation
   - Highlight the paragraph under 1.0 Introduction.
   - Go to "Paragraph" settings and under "Indentation," set the Special option to "Hanging" and the value to 2 inches.
5. Set Font
   - Select the entire text and change the font to Comic Sans MS with font size 11.5 pt.
6. Add Page Border
   - Go to the "Design" tab, select "Page Borders," and apply a Box type border with a width of 6pt.
7. Add Examination Number
   - Insert a text box at the top of the page.
   - Type your examination number and format it using Heading 2 style.

Step 3: Save and Print
1. Save the document again to ensure all changes are applied.
2. Print the document by going to "File" > "Print" and selecting the appropriate printer.

(a) Create a Database
1. Open Microsoft Access and create a new database called "KHANJI DRINKING COMPANY."
2. Create a table named "PRODUCT" with the following fields and data types:
   - Product Name: Text
   - Product Code: Text
   - Company Name: Text
   - Unit Price: Number
   - Date of Manufacture: Date/Time
   - Expiry Date: Date/Time
3. Enter the following data into the table:

Product Name	Product Code	Company Name	Unit Price	Date of Manufacture	Expiry Date
Cocacola	1001 Kwanza	200	2/6/1990	10/10/1993
Pepsi	1002 Tz Brew	150	3/7/1991	8/12/1995
Kilimanjaro	1003 K Brew	550	5/7/1993	8/22/1996
Tusker	1004 Kibo Brew	550	2/6/1990	10/10/1993
Heinekein	1005 South A	1200	7/9/1999	6/19/2002
Safari	1006 K Brew	600	4/23/1989	6/2/1999
Ndovu	1007 Kwanza	550	8/9/1995	4/26/1991
Kibo Gold	1008 South A	550	6/8/1995	10/18/1998
Carlsberg	1009 K Brew	800	3/12/1996	4/1/1998
Castle	1010 South A	600	12/30/1996	9/3/1999

(b) Format the Datasheet
1. Go to the "Home" tab and change the datasheet background color to blue.
2. Change the text color to black.

(c) Set Primary Key
1. Set the Product Code as the primary key for the table.
   - Go to "Design View," right-click the "Product Code" field, and select "Primary Key."

(d) Create a Query for Products Starting with C or Ending with A
1. Go to "Create" > "Query Design."
2. Add the "PRODUCT" table.
3. In the "Product Name" field, set the criteria to:
   - Like "C*" (for products starting with C).
   - OR Like "*A" (for products ending with A).
4. Save the query as "C&A."

(e) Query for Products Manufactured in 1990 or 1996
1. Go to "Create" > "Query Design."
2. Add the "PRODUCT" table.
3. In the "Date of Manufacture" field, set the criteria to:
   - Year([Date of Manufacture])=1990 OR Year([Date of Manufacture])=1996.
4. Save the query as "1990 or 1996."

(f) Query for Product Codes Between 1004 and 1009
1. Go to "Create" > "Query Design."
2. Add the "PRODUCT" table.
3. In the "Product Code" field, set the criteria to:
   - >1004 AND <1009.
4. Save the query as "G&L."

(g) Sort Database by Unit Price
1. Open the "PRODUCT" table.
2. Go to the "Home" tab and select "Sort Ascending" on the "Unit Price" column.
3. Save the sorted database as "Highest."

(h) Calculate VAT
1. Go to "Create" > "Query Design."
2. Add the "PRODUCT" table.
3. Create a calculated field for VAT:
   - VAT: [Unit Price]*0.04.
4. Save the query as "KAG&VAT."

(i) Calculate Unit Sell Price (Inclusive of VAT)
1. Go to "Create" > "Query Design."
2. Add the "PRODUCT" table.
3. Create a calculated field for Unit Sell Price:
   - Unit Sell Price: [Unit Price]+([Unit Price]*0.04).
4. Save the query as "VAT INCLUSIVE."

(j) Print the Work
1. Print the table, all queries, and the VAT INCLUSIVE query.
   - Go to "File" > "Print" for each query and the table.
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