**MOKASA 2 JOINT EXAMINATION**

**451/2 COMPUTER STUDIES – Paper 2**

**(PRACTICAL)**

**JULY/AUGUST 2024**

**TIME: 2½ HRS**

**Kenya certificate of secondary education**

**(K.C.S.E)**

**Name……………………………………………………………...………Adm.No……………..…….**

**Index No. ……………………………..………………Class………………Signature …………..…..**

**INSTRUCTIONS TO CANDIDATES**

1. *Type your name and admission number at the top right hand corner of each printout*
2. *Sign and write the date of the examination below the name and index number on each printout*
3. *Write your name and index number on the compact disks*
4. *Write the name and version of the software used for each question attempted in the answer sheet*
5. *Passwords should not be used while saving in the compact disks*
6. *Answer all the questions*
7. *All questions carry equal marks*
8. *All answers must be saved in your compact disks*
9. *Make a printout of the answers on the answer sheets provided*
10. *Hand in all the printouts and the compact disks.*
11. *This paper consists of 6 printed pages. Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.*

***This paper consists of 6 printed pages. Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.***

**QUESTION 1**

1. (i) Create a folder and name it as the last three digits of your index number.

 (1 mark)

1. Open a word processing program and type the folllowing passage as it appears.Save as **CENSUS** in thefolder created**.** (15 marks)

**POPULATION CENSUS**

**

 *The total enumerated population was****47,564,296****Of which* ***23,548,056*** *were Males,* ***24,014,716*** *were Females.*

* 1. **Background Information**

 The first known population census in Kenya was conducted in 1897 and was basically a headcount. This was followed by the 1948 census that focused on non-natives. A complete census that enumerated 8.6 million persons was conducted in 1962 and was used to set up political and administrative structures.

First post-independence census was undertaken in 1969 and enumerated ~~10.9 million~~ persons. Since then, the country has conducted decennial Population and Housing Censuses on a de-facto basis with the midnight of 24th & 25th August as the reference point.

**1.2 Objectives of the 2019 Census**

**The specific objectives were to ascertain the following:**

**@2019**

* *Population size and spatial distribution;*
* *Levels of fertility, mortality and migration;*
* *Educational attainment;*
* *Household composition;*
* *Rate and pattern of urbanization;*
* *Size and deployment of labour force;*
* *Distribution of persons with disability;*
* *Housing conditions*
* *Agricultural indicators*
1. Create a copy of the passage into a new blank document. (1 mark)
2. Save the document above as **Census 2**  inthefolder created**.**  (1 mark)
3. Set the page as follows: (2 marks)
4. Margin : 1 inch all round
5. Paper size: A4
6. Spell check the document. (2 marks)
7. Perform each of the following on the document
8. Format the title **“Population census”** as follows: (3 marks)
9. Font size: 36 pts
10. Font style:algerian,
11. italize and bold
12. Apply each of the following to the bulleted list: (2 marks)
13. Line spacing 1.5
14. Justified alignment
15. Apply each of the following formats to the text in the document: (2 marks)
16. Drop cap to the word “First’’ in the paragraph with a spacing of 0.75 mm.
17. Distance from text 0.5mm
18. Lines to drop 2
19. (i) Apply the following indentation features to the paragraph starting with the phrase “The first known population ……” (2 mark)
20. Hanging indentation
21. 3.05 cm.
22. Insert footer on the document as follows: (2 marks)
23. Your index number: Left aligned
24. Insert page number at the top right hand corner of the document.
25. Insert a break at the end of the document created such that the new appears section on a new page. (1 mark)
26. Insert a text watermark: **Census 2019 Report**, color, red. (2 marks)
27. (i) Create the table as it appears below. (4 marks)

|  |  |
| --- | --- |
| Year | Population (millions) |
| 1897 | 2.5 |
| 1948 | 5.4 |
| 1962 | 8.6 |
| 1969 | 10.9 |
| 1979 | 15.3 |
| 1989 | 21.4 |
| 1999 | 28.7 |
| 2009 | 37.7 |
| 2019 | 47.6 |

(ii)Calculate the total population in the years represented above (2marks)

(iii)Using the table above, create a bar chart to reprent the information shown in the following table. (3 marks)

(iv)Apply a grey background to the chart area created in (i). (1 mark)

(v)Insert a caption “**CENSUS 2019 REPORT (MILLIONS**)” on the barchart. (1 mark)

(vi)Change the orientation of the page containing the chart to landscape. (1 mark)

1. Apply line page border of thickness 6 pt to the page containing the chart. (1 mark)
2. Save the document and print it on both sides of the paper. (1 mark)

**QUESTION 2**

GEN-Z Computer College received donations from the government and they decided to buy computer accessories. The following items were brought to the school by the suppliers as illustrated in the table below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S.No** | **Name** | **Item Sold** | **Quantity** | **Company** | **Amount** | **Date Of Birth** |
| **001** | Kimberley Chepchumba |  Optical Mouse | 50 | Malaba | 200.00 | 2/07/2000 |
| **002** | Jane Otieno | Desktop System unit | 5 | Kona | 5,000.00 | 3/07/1980 |
| **003** | Mercy Kwamboka | Traditional Keyboard | 40 | Vumbi | 200.00 | 4/07/1992 |
| **004** | Mary Kwambai | CD Writer | 20 | Malaba | 2,000.00 | 5/07/1998 |
| **005** | Faith Nekesa | Computer covers | 54 | Kona | 2,000.00 | 6/07/2001 |
| **006** | Penina Kiptui | Joysticks | 5 | Vumbi | 200.00 | 7/07/2002 |
| **007** | Tabitha Moraa  | LCD Monitors | 23 | Kona | 5000.00 | 8/07/1991 |
| **008** | Maria Atieno | Antiglare screens  | 12 | Malaba | 2,500.00 | 9/07/1992 |
| **009** | Janet Kibe | Flexible Keyboard | 4 | Vumbi | 200.00 | 10/07/2012 |
| **010** | Peacela Daudi | Projectors | 5 | Kona | 6,000.00 | 11/07/2000 |
| **011** | Tembo Laura | Tower-type Computer system | 10 | Kona | 5,400.00 | 12/07/2003 |
| **012** | Manda Kibaba | Ergonomic keyboard | 10 | Vumbi | 200.00 | 13/07/1990 |
| **013** | Jean Toto | Software | 2 | Malaba | 3,000.00 | 14/07/1996 |

(a) Enter the **column headers** into work sheet 1 and save it as **PURCHASES** (1mark)

(b) Restrict all the cells in the Amount column to allow entry of amounts between 0 and 6000. A message, “Input amount <= 6000” should be displayed whenever a cell is selected. Incase of an invalid entry, the message, “Amount >6000”, should be displayed (2marks)

c) Enter the rest of the data in the (13marks)

d) Enter the following title and subtitle in the blank rows respectively: **GEN-ZEE COMPUTER COLLEGE** and **SUPPLIER DETAILS**. Rotate the title 45 degrees, Merge and Centre the title and subtitle across the columns that contain data. (3marks)

(e) Copy the content of Sheet1 to **Sheet 2** into the exact position and Rename it as **Updated price**. (1mark)

f) Insert a new column after the Amount column and label it **“Updated price**.**”**  After the ‘Maandamano’ the suppliers of the items decided to decrease all their items by 10%. Enter the percentage into cell **B21.**  Using absolute referencing, calculate the **Updated price** of each of the items in the “**Updated price** column (3marks)

g) Insert a new column-**Total price** after the column-**updated price.** Calculate the total amount payable to the suppliers based on the quantities of the items procured (use updated (2marks)

h) Using functions:

 (i) Rank the suppliers based on the total price of supplies in descending order. Include a new

Column-rank after total price (2 marks)

(ii) Compute the highest **Total price** procured from each supplier. Compute this in cell **H22** (1 mark)

i) Insert a new column-Age. Using the current date, calculate the **ages** of all the suppliers (3marks)

j) Insert a blank column. Label the new column as **Tax relief.** Using if function compute the tax relief (4mrks)

**TOTAL PRICE TAX RELIEF**

**Total price: >20,000 3%**

**Total price: between 8000 and 20,000 2%**

**Total price between 6000 and 7,999 1%**

**Total price <6000 0.5%**

k) Format the amount column to prefix Ksh (1mark)

l) Create an input mask (forms) that can be used to enter data from the table (3marks)

m) Copy the content of **Sheet1** to **Sheet 3** and Rename it as **Subtotals**. Using **subtotals sheet**,

find subtotals for each Company and display the **Grand Total**. (3mks)

(n)Using the **subtotals sheet**, Create a column graph (bar graph) to compare the total cost of all items bought from each company. The x-axis should be labeled as **“Names of company”** and the y-axis “**Total cost of items**”. Each bar should display a total value it represents on top of it and the supplier’s name below it. The title of the graph should read. **ANALYSIS OF SUPPLIERS.** Include the legend. Place the graph on a new sheet and rename the sheet as **GEN-ZEE GRAPH** (4marks)

 (o) Put the header as your **Name**, **School** and **Index number** as footer for every sheet in your workbook. (1mark)

(p) Save your work on a removable storage media and Print **PURCHASES,** **SUBTOTALS** and **GRAPH** (3mks)

|  |  |  |
| --- | --- | --- |
| **SPREADSHET** | **MAXIMUM MARK** | **STUDENT MARK** |
|  **Column headers** into work sheet  | 1mk |  |
| Save it as **PURCHASES**  | 1mk |  |
| Restrict all the cells in the Amount column to allow entry of amounts between 0 and 6000.  | 1mk |  |
| A message, “Input amount <= 6000” should be displayed whenever a cell is selected.  | 1/2mk |  |
| Incase of an invalid entry, the message, “Amount >6000”, should be displayed. | 1/2mk |  |
| Data entry@1mk for 13 rows | 1@row\*13rows=13mks  |  |
| **GEN-ZEE COMPUTER COLLEGE**  | 1/2mk |  |
| **SUPPLIER DETAILS**.  | 1/2mk |  |
| Rotate the title 45 degrees,  | 1mk |  |
| Merge and Centre the title and subtitle | 1mk |  |
| Copying the content of Sheet1 to **Sheet 2**.  | 1/2mk |  |
| Renaming it as **Updated price** | 1/2mk |  |
| Insert a new column- **“Updated price**.**”**   | 1/2mk |  |
| Entering 10% into cell **B21.**   | 1/2mk |  |
| Using absolute referencing to calculate **Updated price**  | 2mks |  |
| Insert a new column-**Total price**  | 1/2mk |  |
| Calculate the total amount payable to the suppliers | 11/2mk  |  |
|  Inserting a new Column-**rank**  | 1/2mk |  |
| Rank the suppliers based on the total price of supplies in descending order | 11/2mk |  |
| Highest **Total price** procured from each supplier.  | 1mk |  |
| Insert a new column-Age | 1/2mk |  |
| Using the current date, calculate the **ages** of all the suppliers  | 21/2mks |  |
| Inserting a blank column- **Tax relief.**  | 1/2mk |  |
| Using if function compute the tax relief  | 3mks |  |
| Format the amount column to prefix Ksh  | 1mk |  |
| Create an input mask (forms)  | 3mks |  |
| Copy the content of **Sheet1** to **Sheet 3** and renaming **Subtotals**.  | 1/2mk @ |  |
| Using **subtotals sheet**, find subtotals for each Company and display the **Grand Total**. | 2mks |  |
| Create a column graph (bar graph) | 1mk |  |
| The x-axis **“Names of company”**  | 1/2mk |  |
| y-axis “**Total cost of items**”.  | 1/2mk |  |
| display a total value it represents on top of it and the supplier’s name below it. | 1/2mk |  |
| The title -**ANALYSIS OF SUPPLIERS.** | 1/2mk |  |
| the legend. | 1/2mk |  |
| the graph on a new sheet- renamed **GEN-ZEE GRAPH** | 1/2mk |  |
| Header- **Name**, **School**  | 1/2mk |  |
| footer - **Index number**  | 1/2mk |  |
| Print **PURCHASES,** **SUBTOTALS** and **GRAPH**  | 3mks |  |
| **TOTAL** | **50** |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **WORD PROCESSORS** | **MAXIMUM**  | **STUDENT**  |
|  | 1. Creating a Folder and naming(index number)
2. Typing and saving the passage as CENSUS(*Existence in folder*)
* Two paragraphs
* Graphics(cylinders and a circle)
* Patterns on cylinder shapes
* Bullets
* Labels(text in object)
* Double strikethrough
* WordArt
* Vertical text rotation
* Columns with lines between
* Multi-level listing
* Double underline
 | 1mark1 marks@1mk (2mks)@1mk (3mks)1 mark1 mark1 mark1 mark1 mark1 mark1 mark1 mark1 mark |  |
|  | **Creating a copy new document**Saving the document as **Census2***(Existence in folder)* | 1mark1 mark |  |
|  | Setting: i) margin 1 inch all round ii) paper size A4 | 1mark1mark |  |
|  | Spell check the document(*no errors*)  | 2 marks  |  |
|  | 1. **Format title “Population Census” as:**

-Font size 36 pts-Font Style: Algerian -italicize and bold 1. Applying(*to bulleted list*)

-line spacing 1.5-Justified alignment | 1 mark1 mark1 mark1 mark1 mark |  |
|  | **Formatting text in the document**1. Drop cap the word “First” and spacing of 0.75 mm
2. Distance from text 0.5 mm
3. Lines to drop 2
 | 1mark½ mark ½ mark |  |
|  | i) Hanging indentationii)n By 3.05 cm | 1mark1mark  |  |
|  | **Inserting footers**i) Index number left alignedii) page number at the top right corner | 1mark1mark |  |
|  | **Insert**Break at the end of new document | 1mark |  |
|  | Water mark created: **Cencus 2019 Report**Watermark color red | 1mark1mark |  |
|  | 1. Creating a table
2. Calculating otal population/Bar chart created
3. Grey background created to the chart
4. Caption “**CENSUS 2019 REPORT (MILLIONS)**” inserted
5. Page Orientation on chart page to landscape
 | 4 marks3 marks1 mark1 mark1 mark |  |
|  | Applied line page border on page with the chart Border Line thickness 6pt  | 1 mark1 mark |  |
|  | **Printing:**-Document both sides/ Chart printed | 1 Mark @ |  |
|  | **TOTAL** | **50** |  |