** MARANDA HIGH SCHOOL**

**Kenya Certificate of Secondary Education**

 **MOCK EXAMINATIONS 2022**

**451/2 Computer Studies (Practical) Paper 2**

 **September, 2022 Time: 2½ Hours**

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

**Class**: ………………**Candidate’s** **Signature**: ………..…….. **Date: 8th September, 2022**

 **Time: 7.00-9.30 AM**

***Instructions to Candidates***

1. *Indicate your name and index number at the right hand corner of each printout*
2. *Write your name and index number on the CD/removable storage medium provided*
3. *Write the name and version of the software used for each question attempted in the answer sheet provided*
4. *Answer all the questions, All questions carry equal marks*
5. *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.***
6. *Passwords should not be used while saving in the CD/removable storage Medium*
7. *Marked printout of the answers on the sheet*
8. *Hand in all the printouts and the CD/removable storage medium used*

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|  |  |  |
| --- | --- | --- |
| **QUESTION** | **MAX SCORE** | **SCORE** |
| ONE | 50 |  |
| TWO | 50 |  |
| **TOTAL** | **100** |  |

1. KenTelcom is a company that engages in the sales of the following Mobile service providers: Faiba, Gateway, Vodafone and SAF. The company uses sales representatives who operate at various regions in Nairobi town. Each sales representative presents monthly sales to the manager (Values are in Ksh).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | E | F |
|  | **Mobile \_ Accessories Sales LTD** |
|  |  | **Product type** |  |
|  | **Sales Rep.**  | **Faiba** | **Gateway** | **Vodafone** | **SAF** | **Total Sales** |
|  | James | 24000 | 37500 | 39500 | 49500 |  |
|  | Peter | 15000 | 26500 | 21500 | 25500 |  |
|  | Beryl | 5500 | 14800 | 3500 | 16500 |  |
|  | Melanie | 7000 | 15500 | 14500 | 64500 |  |
|  | Mariana | 11000 | 69000 | 2200 | 64500 |  |
|  | Maggi | 33500 | 12000 | 14500 | 23500 |  |
|  | Valentine  | 15500 | 80000 | 17200 | 23500 |  |

1. Using spreadsheet package,
2. Enter the information given in the table above into a worksheet. Save workbook as **KenTelcomREPS** and rename sheet 1 as **Sales.**  (20 marks)
3. Validate all the cells in the Product Type columns to allow entry of numeric data from 0 to 80,000 **only**. A message, Invalid data!: should be displayed whenever a cell is typed with non-compliant data.(3 marks)
4. Using formulae, determine the;
5. Total sales for each Sales representative (2 marks)
6. Product type Total Sales for each provider. (2 marks)
7. Each sales person earns Bonus points for the sales of each product type based on the following criteria.
* 1 point for every sh. 50 for Faiba,
* 2 points for every sh. 60 for Gateway,
* 3 point for every sh. 50 for Vodafone,
* 2 point for every sh. 60 for SAF.
1. Insert a column **Bonus Points** and compute the points of each sales person (5 marks)
2. Insert a blank column **Awards** and based on the Bonus points earned by each sales representative, use a function to display the remarks on Awards as follows: (5 marks)

**Total Sales Awards**

 2,500 and above Cash

More than 1,000 and less than 2,500 Vouchers

1,000 and below try again

1. Format the figures in worksheet as follows: (3marks)
* Title and subtitle:
* Double underline
* Font type – Algerian
* Font size
1. Rotate, all the Product Type heading labels in the worksheet to -900. (1 mark)
2. Generate a column chart to represent the Total sales for each sales representative. Label your chart accordingly and place it in a new worksheet renamed as CHART. (7marks)
3. Print Sales and CHART (2marks)
4. The table below shows list of students admitted to Mangu High School under different sponsors.
5. Open a database program and create a database named **MHS.** (1mark)
6. Create three tables named **Students**, **Sponsor** and **Fees.** (3marks)
7. Using database file created in (a) above use the following field properties. (6marks)

**Student Table**

|  |  |
| --- | --- |
| Field name | Data types and properties |
| School-Code | Default value = 427 |
| AdmNo | Text (Size = 4, Required = Yes ) |
| Student Name | Text (Size = 16) |
| Date of Birth | Date and time (Size = 10) |
| Amount paid | Text (Size = 4, Required = Yes ) |
| SponsorID | LookUp -sponsor table  |
| BankID  | Text |

**Sponsor\_Table**

|  |  |
| --- | --- |
| Field name | Data types and properties |
| SponsorID | Text (Size = 4, Required = Yes ) |
| Sponsor Name | Text (Size = 16)  |

**Amount\_Table**

|  |  |
| --- | --- |
| Field name | Data types and properties |
| BankID | Text  |
| BankName | Text (Size = 10) |
| Amount Per Student | Number (Size = 8, Decimal Place = 2) |
| Mode of payment | Text (Size = 12) |

1. Create the relationship between the tables. **(2marks)**
2. Enforce referential integrity between the tables. **(1mark)**
3. Create the three forms **StudentForm, SponsorForm** and **AmountForm**. (3marks)
4. Enter the following data in their respective tables using the respective **forms**. (8marks)

**Table 1: Sponsor Table**

|  |  |
| --- | --- |
| SponsorID | Sponsor Name |
| S1 | Wings  |
| S2 | Majani  |
| S3 | Elimu  |

**Table 2: Student Table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sch-Code | AdmNo | SponsorID | StudName | BankID | DateOfBirth |
| 427 | 444 | S1 | Lilian Mwende | 100 | 12/03/2000 |
| 427 | 443 | S3 | Ruth Akinyi | 200 | 23/01/1998 |
| 427 | 445 | S2 | Frida Omondi | 100 | 11/07/2002 |
| 427 | 442 | S1 | Bianca Godana | 300 | 12/05/2005 |
| 427 | 410 | S3 | Christine Awuor  | 300 | 28/05/1999 |
| 427 | 413 | S2 | Baraka kalala | 200 | 30/09/1998 |
| 427 | 449 | S1 | Rael Mokaya  | 100 | 18/02/2005 |
| 427 | 411 | S3 | Slivia Odanga | 100 | 17/04/2001 |
| 427 | 412 | S2 | Jane Kawaswa | 200 | 19/06/2004 |
| 427 | 415 | S2 | Jack Jake  | 100 | 22/03/2003 |

**Table 3: Amount Table**

|  |  |  |  |
| --- | --- | --- | --- |
| BankID | BankName | Amount Per Student | Mode of payment |
| 100 | COOP | 550,000 | EFT |
| 200 | KCB | 120,000 | M-banking |
| 300 | EQUITY  | 420,000 | Cheque  |

1. Create a query to display the fields:
2. AdmNo, Sponsor name, age and Students whose first name start with letter **“B”** and whose payment Bank is **“COOP”** Save query as **B-query**. (5marks)
3. StdName, Sponsor name, Mode of payment and Amount per student. Calculate the total amount received. Save query as **AMount-query**. (5marks)
4. Create **Amountreport** from A**mount query**  display all the records grouped by mode of payment and find the average per mode of payment (4 marks)
5. Create a bar chart to display students and their respective amount received. Save chart as S**-chart.**

 (2 marks)

1. Create **S-report** to display the following. (5marks)

Report title Sponsorship Report 2022

AdNo, Student Name, Sponsor Name, Bank Name, Bank ID and Amount

1. Print the following: (4marks)
2. The Student table
3. The B- query
4. The chart
5. The S-report