NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ADM NO: \_\_\_\_\_\_\_\_\_\_\_

SCHOOL: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_SIGNATURE: \_\_\_\_\_\_\_\_\_

DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**451/2**

**COMPUTER STUDIES**

**PAPER 2 (PRACTICAL)**

**TIME: 2½ Hours**

**DIOCESE OF KAKAMEGA**

**MUKUMU DEANERY JOINT EXAMINATION**

**FORM THREE**

**JULY 2021**

**Term 3**

**INSTRUCTIONS TO CANDIDATES**

1. *Create a folder on the desktop of the PC you are using and label it using your Name or Adm No.*
2. *Save all your work in the folder created*
3. *Answer ALL questions*
4. *All questions carry equal marks*
5. *DO NOT USE PASSWORDS*

*This paper consists of 4 printed pages. Pre-candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.*

**QUESTION ONE**

1. Using a word processing program reproduce the work below and save the document as **Geometry One** [32 Marks]

**History of Geometry**

**Egyptians c. 2000 - 500 B.C.**

A

ncient Egyptians demonstrated a practical knowledge of geometry through surveying and construction projects. The Nile River overflowed its banks every year, and the river banks would have to be re-surveyed. See a PBS Nova unit on those big pointy buildings. In the Rhind Papyrus, pi is approximated.

**Babylonians c. 2000 - 500 B.C.**

Ancient clay tablets reveal that the Babylonians knew the Pythagorean relationships. One clay tablet reads *“4 is the length and 5 the diagonal. What is the breadth? Its size is not known. 4 times 4 is 16. 5 times 5 is 25. You take 16 from 25 and there remains 9. What times shall I take in order to get 9? 3 times 3 is 9. 3 is the breadth”.*

**Greeks c. 750-250 B.C.**

Ancient Greeks practiced centuries of experimental geometry like Egypt and Babylonia had, and they absorbed the experimental geometry of both of those cultures. Then they created the first formal mathematics of any kind by organizing geometry with rules of logic. Euclid's (400BC) important geometry book *The Elements* formed the basis for most of the geometry studied in schools ever since.

**The Fifth Postulate Controversy c. 400 B.C. - 1800 A. D.**

There are two main types of mathematical (including geometric) rules: postulates (also called axioms), and theorems. Postulates are basic assumptions - rules that seem to be obvious and are therefore accepted without proof. Theorems are rules that must be proved.

Euclid gave five postulates. The fifth postulate reads: *Given a line and a point not on the line, it is possible to draw exactly one line through the given point parallel to the line.*

**Geometry Today**

Today geometry has a wide range of applications. Amongst the applications it is used for includes: Building and construction, Mechanical plant engineering, Art and design. For example, the drawings below have been reproduced using geometry.

1. Change the top most title into *size*-20, *colour* – red, *double underline*, *upper case* and *font type*-Goudy Stout, *shading colour*-green [3 Marks]
2. Align the headings of the first three paragraphs and the last to the right [2 Marks]
3. Apply a border to each of the headings just aligned in (c) above [2 Marks]
4. Group the sets of objects used to create each of the shapes above [2 Marks]
5. Save the document with the name **Geometry Two** [2 Marks]
6. Indent the third paragraph from both left and right margins by 1” [2 Marks]
7. Adjust the page margins of the document as instructed below [2 Marks]

Top – 0.7” Bottom – 0.7”

Left – 0.8” Right – 0.7”

1. Insert a continuous page break between the third and the fourth paragraph [1 Marks]
2. Save the document with the name **Geometry Three** [2 Marks]

**QUESTION TWO**

1. Create a database with the name School Work [2 Marks]
2. Create the table given below and assign the appropriate data types for the fields. Save the table with the name **Students** [6 Marks]

|  |  |  |  |
| --- | --- | --- | --- |
| **Student No** | **First Name** | **Surname** | **Stream ID** |
| 1013 | Afaf | Salih | LION |
| 1030 | Alfred | Wambui | BUFFALO |
| 1033 | Amos | Gichuki | LION |
| 1032 | Anthony | Ngugi | BUFFALO |
| 1037 | Bethuel | Obonyo | LION |
| 1014 | Charles | Kariuki | LION |
| 1006 | Cyrus | Wangila | BUFFALO |
| 1039 | David | Nabwire | LION |
| 1005 | Francis | Wamalwa | BUFFALO |
| 1025 | George | Kibera | BUFFALO |

1. Set the primary key of the table to be **Student No** field [1 Marks]
2. Create a second table given below and assign appropriate data types for the fields. Save the table with the name **Marks** [9 Marks]

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **RecNo** | **Student No** | **Exam Type** | **ENG** | **KISW** | **MATH** | **BIO** |
| 1 | 1013 | E1 | 95 | 95 | 75 | 84 |
| 2 | 1013 | E2 | 59 | 58 | 59 | 35 |
| 3 | 1030 | E1 | 91 | 65 | 34 | 67 |
| 4 | 1030 | E2 | 58 | 76 | 35 | 85 |
| 5 | 1033 | E1 | 65 | 65 | 84 | 68 |
| 6 | 1033 | E2 | 59 | 95 | 48 | 59 |
| 7 | 1032 | E1 | 72 | 95 | 56 | 74 |
| 8 | 1032 | E2 | 78 | 88 | 76 | 49 |
| 9 | 1037 | E1 | 72 | 89 | 59 | 58 |
| 10 | 1037 | E2 | 66 | 45 | 85 | 75 |
| 11 | 1014 | E1 | 85 | 75 | 84 | 75 |
| 12 | 1014 | E2 | 75 | 65 | 75 | 48 |
| 13 | 1006 | E1 | 36 | 45 | 26 | 75 |
| 14 | 1006 | E2 | 84 | 56 | 69 | 95 |
| 15 | 1039 | E1 | 89 | 83 | 75 | 95 |
| 16 | 1039 | E2 | 84 | 65 | 35 | 64 |
| 17 | 1028 | E1 | 90 | 90 | 68 | 43 |
| 18 | 1028 | E2 | 57 | 32 | 68 | 86 |
| 19 | 1025 | E1 | 89 | 45 | 66 | 64 |
| 20 | 1025 | E2 | 75 | 59 | 85 | 59 |

1. Create a relationship and enhance referential integrity between the two tables [2 Marks]
2. Create a form for the table Students and save it as **frmStudents** [2 Marks]
3. Use the form created in (f) above to enter records in the respective table [5 Marks]
4. Create a second form and for the table Marks and save it as **frmMarks** [2 Marks]
5. Use the form created in (h) above to enter records in the respective table [10 Marks]
6. (i) Create a query from the two tables above and add the fields Student No, First Name, Surname, Exam Type, ENG, KISW, MATH, BIO. Create a calculated field **Total** and accumulate the marks for the four subjects. Save the query with name qryResults [6 Marks]
7. Create a report from the query qryResults and from the report show the **sums** and **averages** of all the subjects and the **Total**. [5 Marks]