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

a) 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.

Ancient 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.

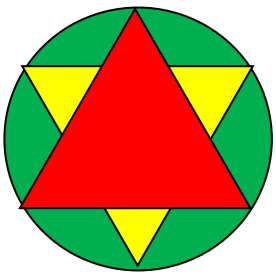
Ancient Greeks practiced centuries of experimental geometry like Egypt and Babylonia had, and they absorbed the experimental geometry of both of those cultures. Then they created the first formal mathematics of any kind by organizing geometry with rules of logic. Euclid's (400BC) important geometry book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

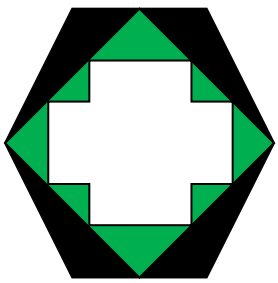
The Fifth Postulate Controversy c. 400 B.C. - 1800 A. D.

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.





b) Change the top most title into *size*-20, *colour* – red, *double underline*, *upper case* and *font type*-Goudy Stout, *shading colour*-green [3 Marks]

c) Align the headings of the first three paragraphs and the last to the right [2 Marks]

d) Apply a border to each of the headings just aligned in (c) above [2 Marks]

e) Group the sets of objects used to create each of the shapes above [2 Marks]

f) Save the document with the name **Geometry Two** [2 Marks]

g) Indent the third paragraph from both left and right margins by 1” [2 Marks]
h) Adjust the page margins of the document as instructed below [2 Marks]
Top – 0.7” Bottom – 0.7”
Left – 0.8” Right – 0.7”
i) Insert a continuous page break between the third and the fourth paragraph [1 Marks]
j) Save the document with the name **Geometry Three** [2 Marks]

QUESTION TWO

a) Create a database with the name School Work [2 Marks]
b) 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

c) Set the primary key of the table to be **Student No** field [1 Marks]
d) 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

e) Create a relationship and enhance referential integrity between the two tables [2 Marks]
f) Create a form for the table Students and save it as **frmStudents** [2 Marks]
g) Use the form created in (f) above to enter records in the respective table [5 Marks]
h) Create a second form and for the table Marks and save it as **frmMarks** [2 Marks]
i) Use the form created in (h) above to enter records in the respective table [10 Marks]
j) (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]
k) 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]