Name………………………………………………………. Index No…………………/…….

School…………………………………………………… Date …………………………..…

Candidate's Signature……………………

451/1
COMPUTER STUDIES
Paper 1
Time: 2 Hours

Kenya Certificate of Secondary Education (K.C.S.E)

INSTRUCTIONS TO CANDIDATES

-       Write your **name, School** and **index number** in the spaces provided above.

-       This paper consists of Two sections **A & B**

-       Answer **ALL** the questions in Section **A**

-       Question 16 is compulsory

-       Answer any **THREE** questions in section **B**

-       All answers to ALL questions must be written in the spaces provided in the question paper

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM MARKS	CANDIDATES SCORE
A	1-15	40	
B	16	15	
	17	15	
	18	15	
	19	15	
	20	15	
TOTAL SCORE		100	

This paper consists of 12 printed pages.
Candidates should check the question paper to ensure that all pages are printed as indicated
and no questions are missing

SECTION A(40 MARKS)

Answers ALL the questions in this section in the spaces provided.

1.   One function of an operating system is to control computer resources. State **four** resources under operating system control   (2 marks)

....

....

....

....

....

2.   a).   Define the term plotter   (2 marks)

....

....

....

....

b).   List two types of plotters   (1 mark)

....

....

....

3   Explain the following terms as used in the word processing   (4 marks)

a).   indenting

....

....

....

b).   Alignment

....

....

....

c).   Foot note

....

....

....

d).   Endnote

....

....

....

4.   List three application areas of artificial intelligence.   (3 marks)

....
....
....
....
....

5. Differentiate between COM ports and LPT ports. (2 marks)

....
....
....
....
....

6. List **three** factors to consider when deciding on the choice of an electronic data processing method. (3 marks)

....
....
....
....
....

7. Ventilation is an important practice in the computer lab because it enhances proper circulation of air. Outline **three** ways in which air is regulated in the computer room. (3 marks)

....
....
....
....
....

8. List **four** advantages of optical disks over floppy diskettes (4 Marks)

....
....
....
....
....
....
....

9. What does the following control measures against computer crime involve? (4 marks)

a). Audit trail

……
……
……

b). Data encryption

……
……
……

c). Log files

……
……
……

d). Passwords

……
……
……

10. List four examples of flat panel displays   (2 marks)

……
……
……
……
……

11. Define the term mail merging   (2 marks)

……
……
……
……
……

12. Name **two** files that are created in mail merging process   (2 marks)

……
……
……
……
……

13. While purchasing computers for his school the principal Musambweni high school decided to

consult an expert. As a computer student advise him on **four** hard ware considerations (2 marks)

………

………

………

………

………

14. Name four methods used in data management on a worksheet (2 marks)

………

………

………

………

………

15. List four formatting techniques used in excel. (2 marks)

………

………

………

………

………

SECTION B. (60 MARKS)

Answer question 16 and Any other three questions

16.   a).   Study the pseudocode below and design a flowchart for the pseudocode. (8 marks)

Set total to zero

Set grade counter to one

While grade counter is less or equal to ten

Input the next grade

Add the next grade into total

Add one to the grade counter

Set the class average to the total divided by ten

Print the class average.

b).   Describe **three** methods of testing the program for errors.   (3 marks)

....
....
....
....
....
....
....
....
....
....

c).   List down **four** selection controls used in writing a program   (2 marks)

....
....
....
....
....

d.   Outline **four** benefits of modularization in programming   (2 marks)

....
....
....
....
....

17   a).   Convert the following numbers of their decimal equivalent   (6 marks)

      a). 11.011_2

      b). 11.1011_2

      c). 111.10101_2

b).   Outline **four** ways in which data integrity may be maintained   (4 marks)

……

……

……

……

……

……

……

……

c).   Discuss **four** advantages of using questionnaires as a fact finding tool   (4 marks)

……

……

……

……

……

……

……

……

d).   What is the role of a recycle bin in Ms. Word?   (1mark)

……

……

……

18.   a).   List **three** advantages of fibre optic cables   (3 marks)

……

……

……

……

……

b).   Differentiate between static RAM and dynamic RAM.   (4 marks)

……

……

....

....

....

....

....

....

c).   Describe the following types of queries found in Ms. Access   (3 marks)

    i).   Update

....

....

....

    ii).   Append query

....

....

....

    iii).   Make table query

....

....

....

d).   Distinguish between source program and object code   (4 marks)

....

....

....

....

....

....

....

e).   Distinguish between a mouse pointer and an insertion point   (1 mark)

....

....

....

19.   a).   Outline **four** major ways the company network administrator can enforce good network practice on user of the company LAN   (4 marks)

……

……

……

……

……

……

……

……

……

……

……

b).   Identify **four** major categories of data handling process which make up a computer

system   (2 marks)

……

……

……

……

……

……

……

……

c).   Outline **four** contents of user manual that would help the user to rum the system with

minimal guidance

……

……

……

……

……

……

d).   Distinguish between dynamic and static systems   (2 marks)

……

……

……

……

e).   List **three** programming languages that can be used by web developers   (3 marks)

……
……
……
……
……
……
……
……

20. a). Masai Teacher's college has decided to automate its library for effective services to the Students. Identify **four** methods they are likely to use to gather information during system development   (4 marks)

……
……
……
……
……
……
……
……
……
……
……
……

b). Define the following terms in relation to internet   (4 marks)

i). Downloading

……
……
……

ii). Hyperlink

……
……
……

iii). Web browsers

....
....
....

      iv).   Internet service providers

....
....
....

c).   Differentiate between sorting and filtering as used in electronic spreadsheet program

                  (2 marks)

....
....
....

d).   Define the following terms   (3 marks)

      i).   Spam mail

....
....
....

      ii).   Disk

....
....
....

      iii).   On board modem

....
....
....

e)   Define the term WIMP as used in computing.   (2 marks)

....
....
....
....
....
....
....

END