KENYA NATIONAL EXAMINATION COUNCIL
REVISION MOCK EXAMS 2016
TOP NATIONAL SCHOOLS

<u>STRATHMORE SCHOOL</u>
COMPUTER STUDIES
PAPER 1

STRATHMORE SCHOOL KCSE TRIAL AND PRACTICE EXAM 2016

451/1
COMPUTER STUDIES
Paper 1
(THEORY)
Time 2 ½ HOURS

Answer all the questions

1. Define the following terms as used in computer.
   a). Firewalls   (1 mk)
   b). Data encryption.   (1 mk)
2. What is an embedded computer?   (2 mks)
3. a) State and explain the three mouse techniques.   (3mks)
   b) Give one reason why a computer is referred to as an electronic device   (1mk)
4. List four fields which would be expected in a database file of information about students in a school.   (2mks)
5. State three changeover strategies that can be used to move from the old system to a new one.   (3mks)
6. What is the meaning of the following as used in word-processing: (2mks)
   a) Word wrap
   b) Drop cap
7. Explain the meaning of legends as used in Excel.   (1 mk)
8. a) List any four examples of DTP software available in the market today.   (2 mks)
   b) What is the difference between the pasteboard and printable area?   (2 mks)
9. What is the difference between looping and selection?   (2 mks)
10. Name the stage of program development cycle when: (2 mks)
    i) A user guide would be written
    ii) A programmer dry-run the code.
    iii) System charts would be drawn
    iv) Staff training is done.
11. Name and explain the function of the following key symbols.
    (i)   (2mks)

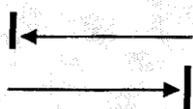   (ii)   (2mks)

    (iii)   (2mks)

12. Explain four reasons which make microcomputers suitable for personal computing work   (2mks)
13. Explain the following terms as used in Ms Excel spread sheet package.   (3mks)

a) Range
b) What if analysis
c) Automatic recalculation

14. Explain the following computer crimes (2mks)
a). Fraud
b). Alteratio

15. State and explain the three parts of a task bar. (3mks)

SECTION B (60 marks)
Answer question 16 and any other three questions from this section in the spaces
provided

16. a) Nakuru car rental firm leases its cars for Ksh 5000.00 per day. The managers give a discount based on the number of days that the car is rented. If the rental period is greater than 12 days then a 20% discount is given. Write a pseudo-code to accept a car number and the rental period, and calculate the total amount earned by the company when a car is leased. (5mks)
b) Use a flowchart to represent the above pseudo-code. (5mks)
c) Identify three advantages of using modular programming in system development. (3mks)
d) Why is observation sometimes disadvantageous when used in fact finding? State two reasons. (2 mks)

17. a) State any two symptoms of the following computer work-related disorders and two methods of prevention.
(i) Computer vision syndrome. (4 marks)
(ii) Repetitive strain injury. (4 mks)
b) Explain any two factors that should be considered during output design. (2mks)
c) List six devices located under the cover of the system unit (3mks)
d) Differentiate between a compiler and an interpreter. (2 mks)

Complier	Interpreter

18. (a) Identify and explain three areas where computers are used to process data. (3mks)
b) Computers have evolved through a number of generations. List any 4 characteristics of the first generation of computers. (2mks)
c) Differentiate between Cache and Buffer memories. (2mks)
d) State three advantages of wireless communication. (3 mks)
e) Explain the following terms as used in data communication. (3 mks)
(i) Multiplexing

(ii)   Bandwidth

(iii)   Base band signal

f)   Explain the use of these communication devices.   (2 mks)

(i)   Routers

(ii)   Hub

19.   a)   Describe the following careers in the computing field.   (3mks)

i)   Computer Engineer

ii)   Software Engineers

iii)   Computer technician

b)   (i)   Give any four advantages of using a fibre optic cable in data transmission
                                                                          (4mks)

(ii) Name two types of fibre optic.   (1 mk)

c)   State the use of the following devices   (2 mks)

i   Light pen

ii)   Graphics tablet.

d)   Name any two advantages of solid-state memories over other storage media.
                                                                          (2mks)

e)   List four factors to be considered when choosing an electronic data processing
       method.   (4 mks)

20.   a)   List and explain the functions of computer buses.   (3mks)

b)   The formula = $B2 + C$4 is entered in cell C5 and then copied to DI0, Write down the
       formula as it appears in the destination cell.   (2 mks)

c)   Give two reasons why smaller computers like Laptops tend to be more expensive
       than Desktop computers   (2 mks)

d)   Giving an example, name three categories of post secondary institutions where one
       can advance computer skills after sitting for K.C S .E.   (3 mks)

e)   List four examples of

i)   Third generation languages.   (2mks)

ii)   Object oriented languages.   (2mks)

f)   Define the term ergonomics   (1 mk)