

Name..... Index No.....  
School..... Candidate's sign.....  
Date.....

451/1  
COMPUTER  
Paper 1  
July/August 2010  
2 Hours

**SIAYA DISTRICT JOINT EVALUATION TEST – 2010**  
*Kenya Certificate of Secondary Education (K.C.S.E)*

451/1  
COMPUTER  
Paper 1  
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2 Hours

**INSTRUCTIONS TO CANDIDATES**

- This paper has **TWO** sections A and B.
- Answer **ALL** the questions in section A
- Answer question 16 (compulsory) and any other **THREE** questions from section B.
- All answers should be written in the spaces provided on the question paper.

**FOR OFFICIAL USE ONLY**

SECTION	QUESTION	SCORE
A	1-15	
B	16	
	17	
	18	
	19	
	20	
<b>TOTAL MARKS</b>		

*This paper consists of 8 printed pages.  
Candidates should check the question paper to ensure that all*

**SECTION A (40 marks)**

1. Give an example of a  
a) Pointing device  
.....  
b) Voice input device  
.....  
c) Device that reads data  
.....  
(3 mks)
2. Distinguish between serial and sequential file organization method  
.....  
.....  
(2 mks)
3. Express 64 base 10 in BCD form  
.....  
(3 mks)
4. Differentiate between Job displacement from job Replacement  
.....  
.....  
(2 mks)
- 5 a) A better media can be used in electronically noisy environment. Which one  
.....  
(1 mk)  
b) Explain the given answer in (a)  
.....  
(1 mk)
6. Why do we have a program design. Explain giving any two reasons  
.....  
.....  
(2 mks)
7. a) What is web design  
.....  
(1 mk)  
b) Name any responsibility carried out by a web design  
.....  
(1 mk)

.....

8. Why is it useful to use questionnaire than an interview (2 mks)

.....

.....

9. a) Describe E-Mail (2 mks)

.....

.....

b) List at least 3 advantages of E-mail (3 mks)

.....

.....

.....

10. Differentiate between a database (DB) and a database management system (DBMS) (2 mks)

.....

.....

11. A worksheet contains the data below

Cell	A1	A2	A3	C1	C2	C3	G1
Entry	5	7	10	10	15	15	SUM 1F (C1:C3, "<>10" a1:a3)

State the value displayed in G1 (3 mks)

12. What is pseudo code as in programming (2 mks)

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.....

13. List four Hardware required for video conferencing (4 mks)

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14. State three factors that determine the amount of data to be stored on a disk (3 mks)

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.....  
.....

15. There are processing methods followed. List any three of them (3 mks)

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

**SECTION B**

a) Write down the output that would be generated by the following program segment

```
NUM: = 1  
Repeat  
NUM: = NUM + 1  
Write (NUM);  
Until (NUM = 9);
```

(3 mks)

b) Write the output, if the statement NUM = 'NUM + 1;)' was changed to 'NUM = NUM - 1;'  
.....

c) The following pseudo code processes data in an array A

```
Start  
n = 3  
For I = 2 to n do  
x = A (i)  
A [0] = x  
j = I - 1  
while A (j) >x do  
    A [j+1] = /j/  
    J = j - 1  
End while  
A (j+1) = x  
Print A (i), A (2) A (3)  
Stop
```

i) What is the purpose of the above pseudo code (1 mk)  
.....

ii) Draw a flowchart of the above pseudo code (8 mks)

17. Despite ATM, Human resources is still necessary in banks.  
a) Give any two reasons why human beings are still needed (2 mks)  
.....  
.....

b) State three advantages of the user of the card (3 mks)  
.....  
.....  
.....

c) What is virtual reality (2 mks)  
.....  
.....

d) List three areas where virtual reality is used (3 mks)

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

e) What is GPS in air traffic control (2 mks)

.....  
.....

f) Outline three ways computers can be used to enhance marketing (3 mks)

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18. Discuss the application of computers in the following areas

i) Research and scientific use (5 mks)

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ii) Education system (5 mks)

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iii) Entertainment system (5 mks)

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b) Describe data processing cycle by use of a diagram.

(8 mks)

c) State two similarities and differences between electronic and mechanical system of data processing

(4 mks)

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