

SOUTERN PROVINCE
KAMONYI DISTRICT
HOLYDAYS WORK
SUBJECT: COMPUTER SCIENCE (S4)
COMBINATIONS:

-MATHS-COMPUTER SCIENCE-ECONOMICS(MCE)

INSTRUCTIONS:

This exam consists of 3 sections: A, B, and C

SECTION A: Attempt all questions

SECTION B: Attempt only 3 questions

SECTION C: Attempt only one question

Use blue or black pen

SECTION A: Attempt all questions from this section (55marks)

1. Define those terms:

/3marks

- a. computer ergonomics
- b. Buffer
- c. Algorithm

2. a) what do you understand by the term computer software

/2marks

b) Differentiate the types of computer software according to purpose

/4marks

3. a. distinguish between variable and constant. / 2marks

b. State five rules that should be observed when choosing constant and variable identifiers.

/5marks

4. Write those terms in full: /6marks

a. CD-ROM

e. USB

i. RSI

b. HDMI

f. SCSI

j. NTFS

c. ESD

g. CRT

k. CPU

d. ALU

h. LCD

l. WIFI

5. Draw a table as shown below and indicate whether a device is an input, storage, processing or output device by putting an X in the appropriate row and column, as demonstrated in row 1. **/4 marks**

Device	Input	Processing	Output	Storage
Mouse	X			
Speakers				
CPU				
Keyboard				
Flash disk				

6. Outline the types of computers according to: **/6marks**
- Size and power
 - Data type
 - Functions
7. Write pseudocode, an algorithm and draw flowchart to find area of a rectangle. **/5marks**
8. convert this hexadecimal to decimal and then to binary. **4marks**
10AFFD
9. i. Convert the following decimal to octal form. **/4marks**
- 1810
 - 3185
10. a) Define array. **/1mark**
b) state 4 factors that need to be considered when declaring array. **/2marks**
11. 19. Mr. Kwizera bought a new electrical kettle. On the power switch of it were two inscribed digits 0 and 1:

Explain what each of the two symbols stand for. **/2marks**

12. Rewrite this program and correct errors if are there. **/5marks**

```
#include<iostream>
using namespace std;
int main
{
    firstInt;
    int secondInt;
    int sum, diff, product, quotient;
    cout << "Enter first integer: ";
    cin << firstInt;
    cout >> "Enter second integer: ";
    cin >> secondInt;
    sum = firstInt + secondInt;
    diff = firstInt - secondInt;
```

```

product = firstInt * secondInt;
cout << "Sum is: " << SUM << endl;
cout << "Difference is: " << diff << endl;
cout << "Product is: " << PRODUCT << endl;
return
}

```

SECTION B: ATTEMP THREE QUESTIONS (30marks)

13. Write c++ program to interchange the values of two variables without using a third variable. /10marks
14. Draw flowchart to find the largest among three different numbers entered by user. /10marks
15. Explain any 5 characteristics that make computer suitable for processing repetitive tasks.

16. a. define nested loop. /2marks

b. By using Nested loop, Write a c++ program that gives this output:
8marks

```

1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
6 6 6 6 6 6

```

17. a. what do you understand by the term number system ?

/2marks

b. By using their symbols, differentiate the number systems used in computing. /8marks

SECTION C: ATTEMP ONE QUESTION (15marks)

18. a. what is a computer system? /2marks

b. differentiate any 4 components of a computer system. / 8marks

c. list any 2 other names of a computer case /2marks

d. outline any 6 components inside a computer case. /3marks

19. write c++ program that display the days of week corresponding to the entered number

(if a user enter 2, it display Tuesday) by using switch case.

20. a. Define logic gates. /1mark

b. Draw any 7 logic gates and their truth tables. /14marks

GOOD LUCK!!!!