

Name:

Index Number:

School:

Candidate Signature:

Date:

EMUHAYA SUBCOUNTY JOINT EVALUATION TERM 2-2025

Kenya Certificate of Secondary Education

COMPUTER STUDIES

Paper 1

(THEORY)

TIME: 2 ½ HOURS

Instruction to Candidates.

- (a) Write your Name and Index Number in the spaces provided at the top of this paper.
- (b) Sign and write the date of examination in the spaces provided above.
- (c) This paper consists of **TWO** sections; **A** and **B**.
- (d) Answer **ALL** the questions in Section **A**.
- (e) Answer question **16** and any other **THREE** questions from Section **B**.
- (f) All answers should be written in the spaces provided on the question paper.
- (g) This paper consists of 16 printed pages. Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

For Examiner's Use Only.

Section	Question	Score
A	1 - 15	
B	16	
	17	
	18	
	19	
	20	
TOTAL		

SECTION A(40 MARKS)

1. What precautions would you take in the computer laboratory incase users are complaining of overheating and suffocation. (2marks)

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

2. State three circumstances which may force an individual to acquire an impact printer instead of non-impact printer. (3marks)

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

3. Beracah was instructed by his teacher while typing a Microsoft word document to replace all the occurrences of the word MS with Microsoft. Highlight the steps to do this. (3marks)

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

4. Computer network technicians prefer to use command-line based operating system when configuring networks. State two reasons for this preference. (2marks)

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

5. Give three limitations of voice input devices (3marks)

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

6. State three functions of Un-interruptible Power Supply (UPS) (3marks)
.....
.....
.....
.....
.....
.....

7. Apart from cost, list three other factors to consider when selecting an operating system to install in a computer (3marks)
.....
.....
.....
.....
.....
.....

8. Barack Omar prepared a five-page brochure of ESALWA School using Ms-publisher. He wanted to insert a school badge in each page of the publication. State two methods he need to apply to execute this task. (2marks)
.....
.....
.....
.....

9. An organization is facing threats to data integrity. Explain three of how the threats can be minimized. (3marks)
.....
.....
.....
.....
.....

10. List three duties of a database administrator. (3marks)
.....
.....

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

11. Discuss one area computers can be used in science and research. (2marks)

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

12. Control unit is an essential component of the CPU. Outline three functions of the control unit. (3marks)

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

13. State the function of each of the following features of an email software.

(i) Spam (1mark)

.....
.....

(ii) Trash (1mark)

.....
.....

14. Excluding passwords, state three other security control measures used to guard against unauthorized access to computers in a network. (3 marks)

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

15. A warranty is an agreement between the buyer and the seller. It spells out terms and conditions after selling a product in case of failure or malfunction. Describe any three basic requirements a good warranty should cover. (3 marks)

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

.....
.....

SECTION B(60 Marks)

16. (a) Define the following terms as used in programming environment (2marks)

i) Test data

.....
.....

ii) Bug

.....
.....

(b) State three ways employed by computer programmers to make the program code easier to understand and follow (3marks)

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

(c) Describe a situation where a loop would be useful when writing a program code. (2marks)

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

(d) Study the pseudo code below and use it to draw a flow chart that will represent it in all aspects (8marks)

- | |
|---|
| <ol style="list-style-type: none">1. Start2. Count =13. Average =04. For Count =1 to 5 Do5. Enter Mark1, Mark 2, Mark 3, Mark 46. Get the sum7. Compute Average8. Is average greater than or equal 509. Print Pass10. Else11. Output Fail12. Average =average +Average13. Count=count +114. Endfor15. Mean score=Average/count16. Stop |
|---|

17. a) i) The school's LAN is done using UTP cable. List two advantages of using this type of cable. (2 mark)

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

ii) Data flows in the school's LAN in a duplex manner. Describe two other types of data transmission in network (2 marks)

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

b) (i) Give two advantages of telecommuting (2marks)

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

(ii) Describe THREE ways in which computers are used as industrial systems. (3marks)

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

c) Outline three factors to consider when selecting data transmission media (3marks)

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

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

d) Mention three functions of network operating systems (3marks)

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

18. a). Convert the binary number 101011110101101110001_2 into its
i) Octal equivalent (2marks)

ii) Hexadecimal (2marks)

b) Use 8-bit two's complement to subtract 3510 from 1710 (4marks)

c) Perform the following calculation (2 marks)

$$110001_2 + 1111_2 - 11111_2$$

d) Describe the function of the following features of a query grid. (1mark)
i) Criteria

ii) Show (1mark)

e) State three outcomes that may result from using incorrect requirement specifications during system development. (3marks)

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

19. a) Five students Jane, Beryl, Baroness, Linda, and Jael scored the following marks in mathematics: 45, 76, 34, 65 and 45. The marks were recorded in cell C3 to C7. Write down the most appropriate function that can be used to give those positions so that they can be awarded in descending order. (3marks)

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

b) Highlight three best practices on behavior while in the computer laboratory (3marks)

.....
.....

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

c) State four benefits of cloud storage in computing. (4marks)

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

d) Highlight three factors that dictate on how an operating system organizes information (3marks)

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

d) Outline two disadvantages of GUI operating systems (2marks)

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

20. Describe **four** main ways of maintaining a computer-based system. (4marks)

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

(b) Explain the following terms as used in Data security

(i) Exploits

(2marks)

.....

.....

.....

(ii) Intellectual property right

(2marks)

.....

.....

.....

(c) Explain the following types of errors.

(i) Overflow error

(1mark)

.....

.....

.....

(ii) Truncation error

(1mark)

.....

.....

.....

(d) Mention two application areas of real processing

(2marks)

.....

.....

.....

(e) Briefly describe how internet platform have revolutionized business operations in the 21st century.

(3marks)

.....

.....

.....

.....

.....

.....