

WAKISSHA JOINT MOCK EXAMINATIONS
MARKING GUIDE
Uganda Advanced Certificate of Education
Computer Sub S850/1
July/August 2023



1. (a) Define the term Computer (01 mark)
A computer is an electronic device that accepts user data and processes it under given instructions to give meaningful output. (Information)

- (b) Outline any four characteristics of a ~~modern~~ computer. (04 marks)
- High storage capacity
 - Multi-tasking *versatile*
 - Speed
 - Artificial intelligence
 - Automation
 - Portability
 - Diligence
 - *Accuracy*
 -

Any 4 X 1 mark = 4marks

2. The use of computers has had an effect on the health of students in the schools.
(a) Describe two health issues caused by the prolonged use of computers. (2 marks)

- Eye strain
- Back pain
- Headache
- Repetitive strain injury
- Neck pain
- Wrist pain
- Fatigue
-
-

Any 2 x 1 mark = 2marks

- (b) For every issue named above give the method that can be used to prevent it. (02 marks)

- Eye strain
- (i) use of antiglare screens
 - (ii) Regular breaks
 - (iii) Enough lighting in the room

Back pain, Neck pain, wrist pain, Headache and fatigue:

- i) Regular breaks
- ii) Use of wrist rest
- iii) Use of ergonomically designed chairs *key boards*

- iv) Enough lighting in the room to reduce on headache
- v)
- vi)
- vii)
- viii)

Note: The method preventing should be matched to the named health issue in 2(a) above.

- (c) Explain the meaning of the term ergonomics. (1 mark)
This is the branch of science or art of designing a work place that provides comfort, safety and efficiency at the work place.
3. (a) Explain the meaning of the term file extension. (01 mark)
This refers to a suffix ^{characters} to the name of a file applied to indicate the file format.
- (b) Write true or false on the following (04 marks)
- i) Data and information is stored in form of files in the computer. **True**
 - ii) .txt is a file extension of a file saved in a notepad. **True**
 - iii) Kakoko.docx is a file extension for word pad. **False.**
 - iv) The file type for wakisha.bmp is MS paint file. **True**
4. Sseguya was type setting the document using his laptop which he saved on his desktop in a folder.
- a) Define the term folder (1 mark)
A folder is a storage location for files and sub-folders.
- b) Outline the procedures he would go through to transfer his work on to a flash disk. (4 marks)
inserting flash disk
- i) Right click on the folder
 - ii) From the short cut menu point on send.
 - iii) From the sub menu point the flash disk drive
 - iv) Click
5. What is the importance of each of the following items in a computer laboratory
- i) Air blower – For removing dust (blow out) dust from hardware components
 - ii) Air conditioner – To regulate temperature
- Dispensing insects from coils
 - To regulate humidity
 - Distribution of fresh air
 - Reducing accumulation of dust
 - iii) Anti-virus **CD** – For installation of anti-virus software
- scanning infected files - deleting virus - deleting infected files
 - iv) Uninterruptible power supply – Protects devices from power fluctuation
complete simple backup - It provides power to devices in an event of electrical problems
 - v) Anti-glare screen – Regulates excess light from monitors especially CRT monitors
- It prevents eye strain.
- ⇒ Access power backup*

5 X 1 mark @ = 5 marks

6. (a) Define word processing *fact/task / way* (1 mark)
Word processing is the art of creating, saving, editing, formatting and printing text documents.

- (b) A student used a word processing application software to draw the table

	B		
C → ICT		A	
			D →

below: Identify the following formatting features used in the table.

- A. Splitting cells
B. Merging cells *Table / Column*
C. Text direction
D. Shading

4 X 1 mark @ = 4 marks

7. (a) Define the term Computer hardware (1 mark)
Computer hardware refers to tangible and physical components of a computer.

- (b) Briefly explain *how* each of the following system devices contributes to *the* general operations of the computer system.

- Hard disk drive – Data storage *file storage*
– Houses the operating system *booting device*
- Power supply unit – Converts AC to DC
– Distributes power to all components
– Changes power ratings
- RAM chips – Necessary during the booting process
– Temporary storage of data
– Provides a platform for loading application software
boosts comp. speed
- Processor – For data processing *data manipulation*
– Controlling the general operations of a computer

Note: any one point x 1 mark = 4 marks

8. a) State three advantages of hard disk in data storage.

- Stores more information
- Reads information faster
- Exposed to less risks its fixed and internal
- Cheaper in terms bytes any 3 x 1 mark = 3 marks

b) Explain the following terms in relation to data storage

- i) Access time – Time it takes storage device to locate data on a storage media. (1 mark)
- ii) Storage capacity: (1 mark)
The amount of data a storage medium can hold at a given time. (1 mark)

9. (a) What is CPU in full (1 mark)
Central Processing Unit

(b) Explain the following machine cycle Processes

- i) Fetching – Collecting instruction from memory
- ii) Decoding - Interpreting of instruction
- iii) Execution – Carrying out the instruction
- iv) Storing – writing results back to memory

4 X 1 mark = 4 marks

NB: Reject if the learner mention data.

10. (a) Name ~~any~~ two types of system software used in a computer. (2 marks)

- Operating system
- Utility software / System utilities
- Programming Languages

Any 2 x 1 mark = 2 marks

(b) Differentiate between shareware and freeware software

Shareware is a copyrighted software provided to the user for a trial period at no cost

While

Freeware is copyrighted software provided to the user at no cost without limitations on use.

Note: a learner should use a conjunction.

ii) The word copyrighted should appear

(c) Name one application software suit that is commonly used in offices.
- Microsoft office suite

Any one correct (2 marks)

11. Tick true or false next to each of the statement

	TRUE	FASLE
a) Database software is used to design presentations of slides		True ✓
b) Microsoft office publisher in an example of DTP	True ✓	
c) E-mail software is used in creating an formatting text in documents.		False ✓
d) Adobe Photoshop is an image and photo editing software.	True ✓	
e) A head teacher preparing a school report to be presented at a parents meeting must use spreadsheet software.		False ✓

12. a) i) *N.B reject words True or False.*
Differentiate between command line interface (CLI) and Graphical user Interface (GUI)

~~Command line interface~~ (GUI) involves use of images and icons to represent data and instruction. *but CLI uses commands.*

(2 marks)

*(ii) - MacOS - Linux
- macOS - OS2*

b) Explain the advantages of Graphical User Interface over command line interface.

(3 marks)

- User friendly
- Can support multi-tasking
- Can process complex graphics
- No need to cram commands

Any 3 X 1 mark = 3 marks

13. a) Study the function structure below and answer the questions that follow:
= IF (D2<60, "NO CASH", 6000)

i) What is the importance of beginning with an equal sign while using the function?
To return manipulated data

ii) The formula = IMSUM ([@ AUG], [@ WAKISSHA]) returns two or more complex numbers. Write the function used in this formula.

Solution: IMSUM

counts the no years but contains values greater than 80.

(1 mark)

b) State the category into which the function in 13a) (ii) above fall
Solution: Logical function

13. *(b)*
a) State two data types used in Microsoft excel.

(2 marks)

- Text
- Number
- Currency
- Date and time
- Graphs

*38
20
12*

- Boolean
- Error
- Formula
- Hyperlink
- Object

Any 2 x 1 mark = 2 marks

14. a) Differentiate between a webpage and website. (2 marks)
 A webpage is an electronic document on a website.
While
 A website is a collection of hyperlinked webpages
- b) Given the following e-mail address: *nyabex@user.name*
 i) *nyabex* - it is the user name
 ii) gmail.com - Domain name *Com - top level domain*
@ separator
- c) Give one example of a web browser that can be used to read emails and send to the above address. *03*
- Mozilla Firefox
 - Opera mini
 - Internet explorer
 - Microsoft edge
 - Google chrome

Any 1 X 1 mark = 1mark

15. A company has decided to introduce an intranet and remove internet for its staff.
- a) Give two reasons why the company will not allow its staff internet access. (2 marks)
- Hacking
 - Virus spread
 - Ponograph
 - Wastage of man working hours
 - ~~Time wastage~~
 - Reduces on production
- b) List down three advantages the company will enjoy for using intranet (3 marks)
- Secrecy confidentiality.
 - Limited access
 - Easy communication
 - Easy sharing of data
 - Reduces on administrative costs
 - Reduces time wastage

Any 2 x 1 mark = 2 marks

Any 3 x 1 mark = 3marks

16. a) Given the following URL;
<http://www.BBC.com/magazine/society.pdf>
 Write the following in full
 i) URL : Uniform Resource Locator

- ii) http : Hypertext transfer protocol
- iii) WWW : World wide web
- iv) Pdf : Portable document format

- b) Identify the top level domain in this URL
.com
Note: Reject without a (.) dot

(1 mark)

17. (a) Define the term computer communication?
This is the electronic transfer of data from one point to another.

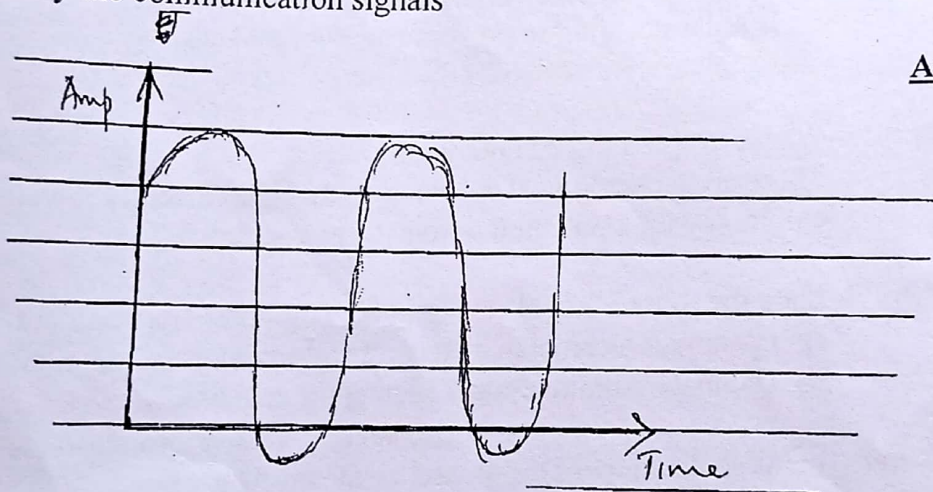
(1 mark)

- (b) Mention any two components of a good data communication system.
- Sender
 - Receiver
 - Message
 - Communication channel
 - Protocol

- c) Distinguish between simplex and duplex transmission made? (2 marks)
Simplex is the transfer of data in only one direction while duplex is the transfer of data in both directions.

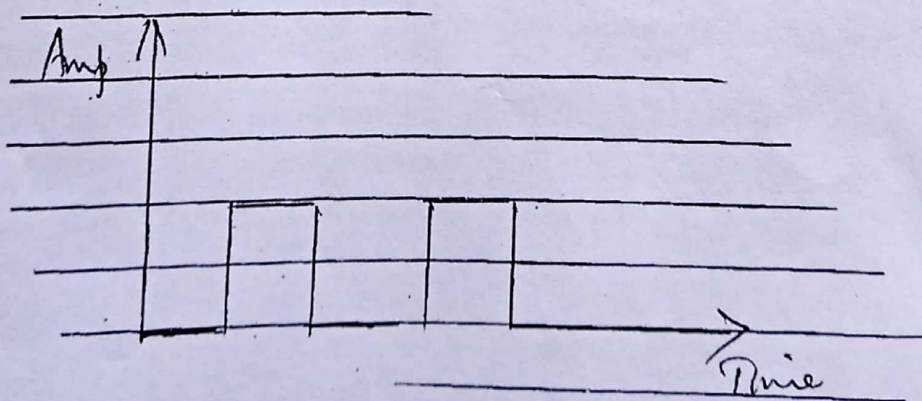
18. (a) Identify the communication signals

i)



Analog

ii)



Digital

(1 mark)

Note: Pick the two graphs from the internet.

- Explain the importance of the following in data transmission
- Start bit – Marks the beginning of the encoding process
 - Parity bit – Checks for errors during transmission
 - Stop bit – marks the end of the encoding process

3 X 1 mark @ = 3 marks

19. (a) Explain the following terms as applied In data security.
- Confidentiality: this means sensitive information belonging to an organization should not be accessed by or disclosed to authorize people.
 - Access control
This specifies and controls who can access what.
- (b) Distinguish between unauthorized access and unauthorized use. (2 marks)
Unauthorized access refers to the use of a computer or network without permission
While
Unauthorized use refers to the use of computers or its data for illegal activities. (2 marks)
- (c) Give one way of preventing computer crimes
- Use of CCTV cameras for surveillance.
 - Encryption of data
 - Activating firewalls on the network gateways.
 - Backing up of data
 - Use of strong passwords and user names.
 - Burglar proofing to prevent unauthorized access
 - Installation of updated anti-virus software.

20. (a) What are emerging technologies?
These are technological innovations that are currently developing or are becoming common with a potential to transform a society.

- (b) State the role of the following in the computer environment

- Computer technician – Repairs and maintains computers.
- Database Administrator- Managing data base - creates, backing up database
 - Use special software for store data.
- Web developer Design and creates websites.

3 x 1 mark = 3marks

END