

SUBSIDIARY ICT MARKING GUIDE

S850/1

Subsidiary Information
and Communication

Technology

Paper 1

August.2024

2¹/₂ hours



KABS ICT RESOURCE CENTER

Uganda Advanced Certificate of Education

SUBSIDIARY ICT

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

*Answer **all** questions in this paper*

*This paper is made up of **twenty** equally weighted questions*

All answers should be written in blue or black ink in the spaces provided in the question paper

For Examiners' Use Only																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Turn Over

*Answer **all** questions in this paper*

1. (a) Explain the term Information and Communication Technology. (02 marks)

- ♣ A collection of related technological tools used to create, store, manage and disseminate information.
- ♣ Information and communication technology is the combination of telecommunication and computer technologies to enhance communication.

(b) In modern world, every person is endeavoring to ease access to information.

Give **three** reasons why students in Secondary Schools should not be allowed to have mobile phones. (05 marks)

- ♣ Cell phones can be used by students for cheating in exams
- ♣ Phones can take away learners concentration during classrooms
- ♣ Can cause insecurity in schools
- ♣ They are expensive to maintain and service by students
- ♣ Increase the rate of immoral behavior through pornography
- ♣ Defamation of fellow students or staff
- ♣ Increase operational costs of the school e.g power bills
- ♣ Can lead to digital divide
- ♣ Hacking/cracking can be done
- ♣ They can be a source of inappropriate or wrong information

2. (a) Differentiate between Computer servicing and computer repair (02 marks)

- ♣ Computer servicing is the caring for a computer to preserve it in a good working condition and to prevent damage while computer repair is the restoring of a computer to an acceptable condition by removing and then replacing or mending of damaged parts.

b) Write one reason for having the following items in the computer laboratory

i) Woolen carpet (01 mark)

- ♣ Absorbs moisture from the floor
- ♣ Absorbs sounds from movements
- ♣ Protects devices from damage when they fall Protects users from electrocution
- ♣ Absorbs dust and prevents it from entering the computers

ii) Blower (01 mark)

- ♣ Removing dust from computer parts

iii) CCTV cameras. (01 mark)

- ♣ Record and playback activities for reference purposes
- ♣ Surveillance-act as a deterrent to theft and other crimes
- ♣ Monitor security at data centers

3. (a) A student had a file on her laptop and wanted to transfer it to a computer in a laboratory. Give **three** devices that she can use to transfer the file.

(03 marks)

- ♣ Flash disk
- ♣ External hard disk
- ♣ Compact disk
- ♣ Digital versatile disk
- ♣ Blue ray disk
- ♣ Zip disks
- ♣ Floppy diskettes
- ♣ Memory cards
- ♣ Magnetic tapes

(b) Teo's network access speed is six megabytes per second. How many kilobytes does Teo's network receive or send per second?

(02 marks)

- ♣ 1MB=1024KB
- ♣ 6MB=1024X6
- ♣ 6144kilobytes

5. During a practical examination students were required to open a blank file and save it as

D:\STUDENT WORK\EOT PRACTICAL\safety.doc.

(a) State the name of the immediate subfolder in which students must save the file.

(01 mark)

- ♣ EOT PRACTICAL

b) Write the root directory onto which the file must be saved.

(02 marks)

- ♣ D:\ or D:

c) Suggest one example of a computer application the student can use to create the file.

(01 mark)

- ♣ Word processing software like Microsoft word

d) State the name of the file represented by the above file path.

(01 mark)

- ♣ safety.doc or safety

5. (a) Explain the following terms in spreadsheet.

(i) Values.

(02 marks)

- ♣ Data that can be manipulated or calculated
- ♣ This is a numerical entry in a cell.
- ♣ All values are right aligned in a cell by default.

(ii) Labels.

(02 marks)

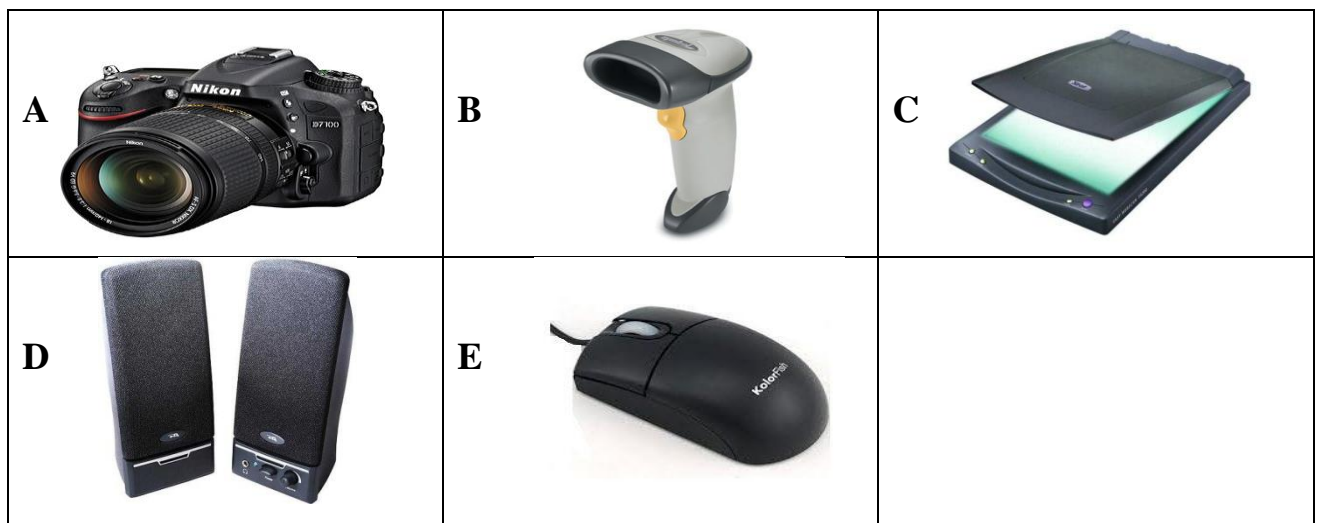
- ♣ Text based entry that identifies data
- ♣ Words on column headings
- ♣ Non mathematical data
- ♣ All labels are left aligned in a cell by default

(b) Name a symbol used when writing functions in a spreadsheet.

(01 mark)

- ♣ Equal sign (=) or @ sign or plus sign (+)

6. Study the devices and answer questions that follow.



(a) Name the devices labeled.

(03 marks)

- ♣ A Digital camera or camera
- ♣ B Bar code reader
- ♣ C Scanner or flatbed scanner

(b) Give one major similarity between devices A and E.

(01 mark)

- ♣ Both are input devices
- ♣ Both are used to feed data into a computer for processing

(c) Identify one device which can be categorized as an output device.

(01 mark)

- ♣ Device D (speakers)

7. (a) What is multiprocessing? (01 mark)

- ♣ Involves the coordinated processing of tasks/programs by more than one processor

b) Give two advantages of each of the following Operating systems

i) Windows. (02 marks)

- ♣ Readily available on market
- ♣ Software downloads, patches, fixes are available online
- ♣ Supports networking
- ♣ Supports multitasking
- ♣ Compatible with almost all machines
- ♣ Interoperable with most software
- ♣ Easy to use since it supports many interfaces
- ♣ Easy to learn Light-takes little disk space
- ♣ User support readily available online

ii) Linux (02 marks)

- ♣ Supports networking
- ♣ Supports multitasking
- ♣ Interoperable with most software
- ♣ Compatible with almost all machines
- ♣ Free of charge
- ♣ Flexible-users can change the code-open source
- ♣ Resistant to viruses

8. Identify five ICT related employment opportunities in Uganda today (05 marks)

- | | |
|--|-------------------------------------|
| ♣ Writing CDs | ♣ Computer servicing and repairing |
| ♣ Music mixing | ♣ Advert designing |
| ♣ Internet café management | ♣ Computer laboratory attending |
| ♣ Video editing | ♣ Switchboard operating |
| ♣ Computer secretarial bureau management | ♣ Computer programming |
| ♣ Computer vendoring or dealing | ♣ Software engineering |
| ♣ Digital money transfer dealing | ♣ Network administering |
| ♣ Teaching ICT | ♣ Servicing and repairing computers |

9. (a) Define the term **Motherboard**. (02 marks)

- ♣ A piece of silicon or semiconducting material onto which integrated circuits or other electric components are embedded/printed/fixed.

- ♣ A circuit board found inside the system unit that holds a number of electronic components attached to the computer.

(b) Identify any **three** components housed on the motherboard. (03 marks)

- | | |
|-------------------------------|----------------|
| ♣ Microprocessor | ♣ Buses |
| ♣ BIOS chip | ♣ CMOS battery |
| ♣ Display adapters | ♣ Heat sink |
| ♣ Built in VGA | ♣ Transistors |
| ♣ NIC | ♣ Ports. |
| ♣ AGP and PCI expansion slots | |

10. (a) Define the following terms as used in publications.

(i) Frame. (01 mark)

- ♣ A feature that enables a user to fit in the required text or image of the required dimension.

(ii) Template (01 mark)

- ♣ A computer document containing basic information that is used as a model for writing other documents such as business letters, envelopes, etc.
- ♣ This is a tool having a pre-formatted design styles that can be used in publication to help a user easily create basic publication.

(b) List any **two** desktop publication soft wares (02 marks)

- ♣ Adobe illustrator
- ♣ Microsoft Office Publisher (Ms Publisher)
- ♣ Adobe PageMaker
- ♣ Print Master
- ♣ PrintShop Professional
- ♣ Siera Print Artist
- ♣ Coral Draw
- ♣ Adobe InDesign
- ♣ Serif page plus

(c) Name a document that can be produced using publication software. (01 mark)

- ♣ Brochure
- ♣ Cards
- ♣ Certificates
- ♣ Calendars
- ♣ Posters
- ♣ Flyers • Banners

- ♣ Webpage
- ♣ Newsletter

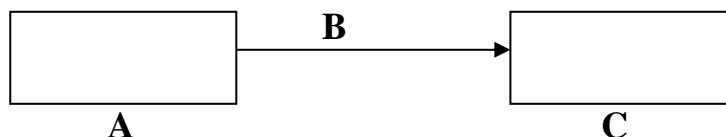
11.(a) Outline any **three** threats a System Administrator may face as a result of networking computers. (03 marks)

- | | |
|---|---|
| <ul style="list-style-type: none"> ♣ Eavesdropping / lack of privacy ♣ Data fabrication/modification ♣ Data theft ♣ Pharming ♣ Phishing ♣ Hacking ♣ Virus attack | <ul style="list-style-type: none"> ♣ Cracking ♣ Spamming ♣ Plagiarism ♣ Taping ♣ Sniffing ♣ Spoofing ♣ Vishing |
|---|---|

(b) Suggest any **two** measures that the system administrator can employ to reduce the network threats. (02 marks)

- | | |
|---|--|
| <ul style="list-style-type: none"> ♣ Use passwords. ♣ User account authentication ♣ User access control levels ♣ Use anti spyware ♣ Use antivirus ♣ Data encryption | <ul style="list-style-type: none"> ♣ Use firewalls ♣ Use biometric authentication. ♣ Use possessed objects e.g electronic cards |
|---|--|

12. Study the data communication diagram below and answer the questions that follow:



(a) Name the elements of data communication labelled; (03 marks)

- ♣ Sender/sending device
- ♣ Communication channel/path or transmission medium
- ♣ Receiver/receiving device

(b) Suggest the devices used to connect **A** to **B**. (01 mark)

- ♣ NIC (Network Interface Card)
- ♣ USB card

(c) State the protocol used to uniquely identify **A** and **C**. (01 mark)

- ♣ Internet protocol

13. Explain the following as applied to Internet:

Turn Over

(a) Hotspot.

- ♣ A location where an internet connection can be accessed wirelessly
- ♣ A specific location that provides a data link or connection on a wireless network.

(b) Internet Service Provider.

(01 mark)

- ♣ An ISP is a company that provides Internet connections to individuals and other companies.

(c) Search Engine.

(02 marks)

- ♣ A program used to find web contents using keywords or leading statements on the World Wide Web.

14.(a) Give **two** reasons to justify ownership of institutional websites.

(02 marks)

- ♣ To have copyright over the site
- ♣ To have patent rights over products on the site
- ♣ To have the right to sell products online
- ♣ To have a right to post information online
- ♣ To have a right to advertise goods and services
- ♣ To have a right to edit and format the content on the site
- ♣ When the company has online interaction with the public
- ♣ To welcome criticism or feedback from the public
- ♣ To encourage pride of ownership
- ♣ To advertise the business
- ♣ To sell products online

(b) (i) What is a web browser.

(01 mark)

- ♣ Software used to navigate content on websites

(ii) Under what circumstances can someone use a Uniform Resource

Locator (URL) in a web browser?

(02 marks)

- ♣ When a person wants to access a specific resource directly on the internet
- ♣ In case a person knows a particular link of a given site or webpage

♣ In case a person wants to quickly access a particular site/page/resource

♣ In case a search engine fails to locate the site link

15. The table below shows a worksheet which Nabirye was working on. Use it to answer the questions that follow.

	A	B	C	D	E
1	ID Number	Name	Item 1	Item 2	29.1
2	100000	Akello	990	34	11.8
3	100000	Nambi	660	58	#DIV/O!
4	#####	Busingye	8800	-	
5				#NAME?	
6					

a) (i) Suggest a reason why the entry in cell A4 appeared as shown. (01 mark)

♣ The column width is not wide enough

(ii) How do you rectify the error in cell A4? (01 mark)

♣ Widen or increase the column width

♣ Autofit

♣ Reduce the font size

(iii) What does the error in cell E3 mean? (01 mark)

♣ Attempting to divide a number by zero (0) which is mathematically wrong

(iv) How do you correct the error in cell D5? (01 mark)

♣ Typing the correct function name

16. Read the statement below and write the words TRUE or FALSE in the spaces provided. (05 marks)

STATEMENT		TRUE/FALSE
(a)	Machine code is one of the level computer languages.	TRUE
(b)	Microsoft is the only operating system in use in Uganda	FALSE
(c)	WINZIP is an example of system software which reduces the actual size of a file	TRUE
(d)	A student delivering a presentation would need an LCD projector and laptop.	TRUE

(e)	Screen savers can be categorized as desktop publishing software since they can be used for advertising purposes.	FALSE
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16.(a) Give **two** situations under which electronic presentations would be used. (02 marks)

- ♣ During teaching
- ♣ When presenting or addressing a big audience
- ♣ During advertisements

(b) State three advantages of using electronic presentations over the traditional chalk and talk. (03 marks)

- ♣ An electronic presentation can be save for future reference compared to traditional chalk and talk
- ♣ Makes the presentation more interesting due to use of multimedia like animations and transitions
- ♣ Visual explanations/illustrations are more clear
- ♣ An electronic presentation is more systematic and precise

17.(a) Distinguish between hyperlink and homepage. (02 marks)

- ♣ A **hyper link** is a built-in connection to another related page or part of a webpage which can be a text or image while A **home page** is the starting/index/first page of a website which can act as a list/table of contents or an index page to the website

(b) Identify **three** netiquette guidelines while using the internet. (03 marks)

- ♣ Keep message brief and use proper grammar and spellings
- ♣ Be careful when using sarcasm and humor
- ♣ Never read someone's private mail
- ♣ Minimize use of uppercase in text when sending messages
- ♣ Post only acceptable information that has no harm to the public
- ♣ Avoid impersonation
- ♣ Adhere to the same standards of behavior online that you follow in real life
- ♣ Know where you are in cyber space
- ♣ Respect other people's time and bandwidth
- ♣ Make yourself look good online
- ♣ Help keep flame wars under control
- ♣ Respect other people's privacy
- ♣ Don't abuse your power
- ♣ Be forgiving of other people's mistakes
- ♣ Logout or log off your account after use
- ♣ Forward e-mail messages you receive only with permission of the sender.

- ♣ Remember you are not anonymous. What you write in an e-mail and web site can be traced back to you.
- ♣ Obey copyright laws. Don't use others' images, content, etc. without permission.
- ♣ Use distribution lists appropriately and with permission.
- ♣ Do not send SPAM i.e. posting or e-mailing unsolicited e-mail, often advertising messages, to a wide audience

19. (a) Give any **two** services that use Electronic payment (E-payment) method.
(02 marks)

- | | |
|-----------------------------|----------------------|
| ♣ Banking | ♣ Civil service |
| ♣ Education | ♣ Entertainment |
| ♣ Health / medical services | ♣ Revenue collection |
| ♣ Transport | ♣ Communication |
| ♣ Online trade | ♣ Utility |
| ♣ Insurance | |

(b) State **three** advantages of using E-payments over traditional methods.
(03 marks)

- ♣ Quick delivery of money.
- ♣ Transaction can be done at any time.
- ♣ It is more secure since there is no physical handling of money.
- ♣ It is efficient in terms of cost and time.
- ♣ Reduced counterfaite

20. Using the email address:**annet@gmail.com**, identify what these parts stand for.

(a)annet. (01 mark)

- ♣ User name
- ♣ User
- ♣ User ID
- ♣ Unique ID

(b) @ . (01 mark)

Symbol that separates the e-mail user name from the rest of the address

(c)gmail (01 mark)

- ♣ Domain name
- ♣ The service provider
- ♣ Server name

(d) .com

(02 marks)

- ♣ Organization name (where the e-mail account is held)
- ♣ Top level domain (type of domain where the e-mail account is held)