

Name: Stream:

S850/1
Subsidiary ICT
Paper 1
Nov./Dec 2017
2 ½ hours

DRAFT MARKING GUIDE

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KOLOLO SENIOR SECONDARY SCHOOL

Uganda Advanced Certificate of Education

Senior Five End of Year Examinations 2017

SUBSIDIARY INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 1

2 hours 30 minutes

Instructions to Candidates:

Attempt **all** questions in this paper.

The paper is made up of **20** equally weighted structured questions each carrying **5** marks.

Write your answers in the spaces provided.

No additional materials (answer sheets) will be provided.

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total

Question Allocation

Topic	Questions				
Introduction to Computers	19				
Lab Care, Troubleshooting and Maintenance	5	13			
File management	3	20			
Computer Hardware	1	6	8		
Computer Software	7	9	14		
Internet and World Wide Web	2	11	15	16	
Applications [Word processing, Spreadsheets, Presentations]	4	10	12	17	18

Answer **all** questions on this paper

1. Indicate true or false for the following statements. (5 marks)

- (a) Visual display units can be either input or storage devices False
- (b) Output devices provide feedback to the users True
- (c) Dot-matrix printers produce better image than inkjet printers False
- (d) Secondary storage media is volatile False
- (e) The more pixels per square inch on a computer monitor the high the resolution True

2a) What is internet? (1 mark)

- *A global inter connection of computer networks.*

b) Show **one** way in which the internet can be a danger to:

a) Morality (1 mark)

- *Exposure to pornography and illicit materials*
- *Loss of respect to the elderly*
- *May lead to juvenile delinquency*
- *Young people may learn to take drugs*
- *Decline in cultural norms and values*

b) Labour (1 mark)

- *Loss of man-hours when workers surf at the expense of their work*
- *Workers may do personal research wasting organizational resources*
- *Internet may replace some workers rendering them jobless*
- *Redundancy of workers when the internet connection fails*
- *A lot of trickery and wrong information about jobs over the internet*
- *Facilitates surveillance leading to loss of workers' privacy*
- *Loss of craftsmanship and creativity due to over reliance on computers*

c) System security and Information (1 mark)

- *Facilitates rapid spread of computer viruses*
- *Illegal access from hackers and crackers*
- *Facilitates phishing and pharming*
- *Spread of Wrong information*
- *Change of data and information along communication lines*
- *Plagiarism*

d) Human security (1 mark)

- *Facilitates surveillance which leads to loss of privacy*
- *Defamation*
- *Identity theft*
- *Cyber bullying*
- *Cyber terrorism*
- *Impersonation*
- *Abusive and threatening messages*

3a) Distinguish between **copy a file** and **move a file**. (2 marks)

- *Copy a file involves making a duplicate of a file while move a file involves changing the location of a file/transferring a file from one location to another.*

b) Study the file path below and answer the questions that follow. (3 marks)

F:\accounts\bursar\fees.xls

i) Identify the file name

- *Fees or fees.xls*

ii) On what drive is the file located?

- *Drive F*

iii) In which sub-folder is the file located? • *Bursar*

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

	A	B	C	D	E	F
1	ID NUMBER	Name	Item 1	Item 2		
2	100000	Akello	990	34	29.1	
3	100002	Nambi	660	56	11.8	
4	#####	Busingye	880	-	#DIV/0!	
5			#NAME?			
6						

- a) Suggest a reason why the entry in cell A4 appeared as shown. (1 mark)
- *The column width is not wide enough.*
- ii) How do you rectify the error in cell A4? (1 mark)
- *Widen or increase the column width.*
 - *Autofit.*
 - *Reduce the font size.*
- b) What does the error in cell E4 mean? (1 mark)
- *Attempting to divide a number by zero (0) which is mathematically wrong.*
- c) How do you correct the error in cell C5? (1 mark)
- *By typing the correct function name.*
- d) Suggest the correct formula for adding the values in cells C1, C2 and C3 using a function in C5 (1 mark)
- =SUM(C1: C3)*
5. (a) State **two** causes of computer data loss. (2 marks)
- *Power fluctuations*
 - *Computer virus infections*
 - *Accidental deletion of files*
 - *Improper shutting down of computers*
 - *Disk crushing*
- (b) State **three** precautions taken to protect data loss in a computer. (3 marks)
- *Install an antivirus software and update it frequently*
 - *Connect the computer to a power backup such as UPS*
 - *Shut down the computer using the correct procedure always*
 - *Avoid careless handling and storage of disk.*
- 6a) What are input devices? (1 mark)
- *It refers to hardware devices used for inserting data into a computer system.*
- b) Give **four types** of data in (4 marks)
- 1) Text 2) Audio / Sound 4) Graphics 5) Video*
7. Suggest the kind of application software that would best fit the jobs of the following persons: (5 marks)
- a) A writer - *Word processor*
- b) A SOHO accountant - *Spreadsheet software*
- c) A teacher delivering his/her lesson - *Presentation software*
- d) An architect - *Computer-aided design software*

e) A graphic designer - [Graphics software](#)

8. Complete each sentence below using one item from the list. (5 marks)

Hard disk, Ports, RAM, Sockets, ROM, Cables, 16, 8, 1000, Servers, Standalones, Clients, Switches

- (a) A **Hard disk** is a secondary storage device found inside the computer's system unit.
- (b) **ROM** is a type of memory that does not lose its contents when power is switched off, stores programs that start a computer and does diagnosis.
- (c) **8** bits of information make up a byte.
- (d) The points of connection between a computer (motherboard) and its peripherals are called **Ports**.
- (e) **Client** refers to a number of computers controlled by one central host computer.

9.(a) List **three** characteristics of good computer software. (3 marks)

- ✓ Accessible
- ✓ Fair in terms of cost and maintenance
- ✓ User guide
- ✓ Flexible
- ✓ Easy to install
- ✓ Occupy small space on the hard disk
- ✓ Not easily affected by the virus e.g Linux
- ✓ Free from bugs.
- ✓ Up gradable
- ✓ Well documented.

(b) Mention any **two** factors you would consider before obtaining software. (2 marks)

- ✓ Cost
- ✓ Accessibility
- ✓ User friendliness
- ✓ Documentation / User guides
- ✓ Ease of use
- ✓ Compatibility with other software

10. Complete the following statements by filling in the spaces with a word from the list provided below: (5 marks)

page setup, cursor, margins, orientation, section break, themes, table, spell checker, bookmark, thesaurus, mail merge, table of contents, watermark, hyperlink, footnotes, endnotes, indent

- a) A background feature in a document is referred to as **Watermark**
- b) The feature that allows duplication of a document with unique addresses is **Mail merge**
- c) The feature that starts a line of text further from the margin is **Indent**
- d) The feature that assigns a name to a specific point in a document is called **Bookmark**
- e) A symbol on the screen that indicates an insertion point in a document is a **Cursor**

11. (a) What is **cloud computing**? (1 mark)

Cloud computing is Internet-based computing, whereby shared resources e.g hardware, software and information are used remotely by users over the internet as a service, on demand.

(b) Of what relevance is the new trend of cloud computing to you as an ICT student. (2 marks)

- Easier group collaboration: multiple users can collaborate easily on cloud based documents and projects.
- Unlimited storage capacity: Cloud computing offers virtually limitless storage on servers in powerful datacenters.
- Provides software accessible anywhere as a service through the internet.
- Reduced software costs: Instead of purchasing expensive software applications, you can get most of what you need cheaply, e.g most cloud computing applications

today, such as the Google Docs suite better than paying for similar commercial software.

- Enables remote usage hardware infrastructure services via the internet, reducing cost.
- Increased data reliability/ safety: Unlike desktop computing, in which if a hard disk crashes and destroy all your valuable data, a computer crashing in the cloud should not affect the storage of your data.
- Universal document access: That is not a problem with cloud computing, because you can access it whenever you have a computer and an Internet connection.
- Device independence: Even to a portable device, and your applications and documents are still available.

(c) Apart from cloud computing, list any other two internet services you know. (2 marks)

- Telnet – enables users to use the resources of a computer in another part of the world. This is done by remotely logging to the distant computer which is called the host.
- Email – It allows the transfer of messages, documents, and pictures among others, across the Internet.
- Mailing list – This is based on the email protocol. As an electronic mailing list it is very convenient when somebody wants to send a message or newsletter, for example, to many people in one go.
- Internet Relay Chat (IRC) – A live interactive discussion in which parties on the network exchange ideas and observation electronically. Chats are usually organized in what we call chat rooms.
- File Transfer Protocol – The standard method for transferring files, whether downloading or uploading, to and from your computer with another computer on the Internet.
- Newsgroups – Worldwide discussion areas where notices can be posted for anyone to view. They are equivalent to a discussion group or an electronic bulletin board. There are newsgroups for every conceivable topic and more, e.g. educational technology.
- World Wide Web – This refers to the global collection of linked electronic documents called Webpages stored on internet servers all over the world. The www is the most exciting service that has revolutionized the Internet, people use this service to browse for information.
- Instant Messaging: A combination of real-time chat and e-mail by which short text messages are rapidly exchanged over the Internet, with messages appearing on recipient's display screen immediately upon arrival.
- Usenet or User's Network: A system of worldwide discussion groups, not an actual physical network. Netiquette: A list of simple newsgroup guidelines that keep people from making mistakes.
- Internet Telephony or Voice over the Internet or Voice over IP: Real-time voice conversations transmitted between computers on the Internet.
- Web Directory: A listing of Web sites and their URLs, categorized by topic.
- Electronic Commerce/e-commerce: Conducting commercial activities on the Internet.
- Social Networking. A type of service where users can seek others who share their interests, find out what's going on in their areas of concern, and share information with one another (e.g. Facebook, Twitter).
- Search Engines: Software programs that look through the Web to locate sites matching a keyword entered by the user. Keyword: A string of letters or words that indicates the subject to be searched.

12. Use the terms below to complete the sentences that follow in (a)-(e). (5 marks)

Slide transition	Slide design
Slides	Slide show
Animation effect	Slide master
Slide layout	Handouts

- a) The visual movement from one slide to another slide is **slide transition**.
- b) The **animation effects** setup the way text/objects appear on a slide during a presentation.
- c) The presentation of slides in a sequence on a projection screen is referred to as **slide show**.
- d) The **slide layout** defines the arrangement of all items that make up a slide.
- e) A user can print the entire presentation on one page by printing the **handouts**.

13 (a) Distinguish between a surge protector and the UPS. (1 mark)

A Surge protector only protects the computer from high voltage while a UPS protects the computer from sudden power loss.

(b) Mention **four** ways of preventing dust accumulation in a computer laboratory, on computer systems and equipments. (4 marks)

- Remove shoes when entering the Lab
- Cover the computers with plastic dust covers
- Fit heating, ventilation and Air conditioner systems
- Put a door mat at the door for dusting off
- Fit a carpet on the floor and vacuum clean it regularly
- Put curtains on the windows.

14 (a) (i) What is a network operating system (NOS)? (1 mark)

A network operating system (NOS) is an operating system that runs on a server computer that controls a computer network.

(ii) Give **two** examples of NOS. (2 marks)

Windows Sever 2012. Windows Sever 2008. Novell Netware, NetWare, Unix Server, etc.

(b) State **four** tasks that are normally performed by a network operating system.

- User Login Authentication
- File management
- Network Printer management
- Network Security such as firewall management
- Scheduling of automated tasks
- Storage and backup management
- Connecting to the internet

15(a) With examples, define a social networking website. (1 mark)

A social networking site is a website where individuals can set up a profile and interact with other users. Examples: Facebook, Twitter , LinkedIn, Pinterest, Google plus+ etc

(c) State **one** disadvantage of social networking websites. (1 mark)

- **Perpetuates False And Unreliable Information:** Anyone can post any unverified rumours which cause panic and severe misinformation in society.
- **Causing Major Relationship Problems:** Online social interactions have caused many breakups.
- **Cyber Bullying:** A new trend of cyber bullying is wreaking havoc all across the world. This is especially true with young kids publicly harassing one another, and posting mean or slanderous things which are broadcasted to the entire cyber world.
- **Used To Profile and Discriminate In The Job World:** Employers are using social media to pre-screen their applicants.
- **The Addiction Is Real:** One of the biggest problems with the social media craze is that people are becoming more and more addicted to using it. It is the number one time waster at work, in school, and at home.
- **Privacy Violation:** Social Networks may violate privacy in case someone else gets to know your user password.
- **Misinterpretation:** One has to be careful while posting any kind of information on social networks. If typed in a hurry, the matter could be misinterpreted.
- **Time Consuming** – Social networking sites can suck you in and before you know it you've spent hours looking at pictures, videos, and reading clever posts.
- **Negative Publicity** – People really like to use social networking sites as a place to express their frustration and disapproval of a business that they feel has wronged them in some way.

(c) Give **two** netiquette guidelines ICT users are advised to follow while online. (2 marks)

- Respect for other people's views, resources and time while online

- Control spread of virus
- Respect of human dignity
- Do not use the internet to insult or abuse other
- Keep your message brief and use proper grammar and spellings
- Never read someone's private mail
- Minimise 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.

16. Study the URL and answer the questions that follow: (5 marks)

http://www.ecdl.org/regions/africa/uganda.html

- What does http stand for?
Hyper Text Transfer Protocol
- The domain name is
ecdl
- Which is the **top-level domain (TLD)** in this URL?
Organization
- What does **"regions/africa/"** represent in this URL?
The path
- What is the **document name** which is currently opened on this website?
uganda.html

17. (a) Microsoft PowerPoint is the most popular Presentation software application program that is used to display slides on the computer or projector. (2 marks)

i) Apart from PowerPoint, identify any **two** other presentation software on the market today.
Lotus Freelance Graphics, KPresenter, OpenOffice.org Impress, Corel Presentations, Celframe Power Presentation, Ability Presentation, Kingsoft Presentation, Apple Keynote.

b) Give any **two** advantages and **one** disadvantage of using presentation software in class during teaching and learning. (3 marks)

Advantages

- Presentation software supports teaching learning process by facilitating the material presentation.
- Multimedia components such as clipart images, video clips and audio clips can be incorporated into the slides.

- The timing of the slides can be set so that the presentation automatically displays the next slides after a predetermined period of time.
- Special transition effects can be applied between each slide.
- The presentation can normally be viewed and printed in different formats.
- Presentation software is able to perform a variety of manipulations, such as editing text before printing it out, and the teacher can add new slides for adding new materials.
- It allows the users to reflect on a lesson and correct any changes, and they can create the perfect lessons and are being able to print them out.
- Using Presentation software improve the students' learning motivation, increasing authentic materials for study, encouraging interaction between the teacher and the students.
- Presentation Slides can be saved and reused in future.

Disadvantages

- **Equipment failure:** The component system sometimes does not work as expected. The main failure in projector is rare but possible. The solution here is to have alternative activities, for example good preparation.
- **File Corruption:** This damage caused by magnetic or physical damage so that the presentation will not run. To overcome this problem, CD (compact disk) which is unaffected by magnetic field can be used.
- **Incompatible Media:** Incompatible media means the incompatible the system available. The best solution is to be aware of the systems to use our own laptop.

18 (a). Give the difference between **editing** and **formatting** of a document. (1 mark)

Editing means making changes to the content in a document,
while Formatting means enhancing the appearance of a document.

(b). Mention **two** word processing program facilities used to:

(i). **Edit** a document. (2 marks)

- ✓ Copy.
- ✓ Paste.
- ✓ Cut.
- ✓ Find and replace.
- ✓ Spell check.

(ii). **Format** a document. (2 marks)

- ✓ Bold.
- ✓ Underline.
- ✓ Alignment (left, centre, right, justify)
- ✓ Indent paragraph.
- ✓ Line spacing.
- ✓ Bullets and numbering.
- ✓ Use of highlights.
- ✓ Change font colours.
- ✓ Change font sizes.
- ✓ Use of superscripts and subscripts.
- ✓ Strike through. e.t.c.

19) Explain the following attributes of computers which make them dependable and reliable tools. (4 marks)

- (a) **Versatility:** Modern Computers can perform different kinds of tasks at the same time. For example you can play music while typing a document at the same time. This is also known as multi-tasking.
- (b) **Diligence:** Computers have the ability to perform the same task for a long time without getting tired. This is because a computer is a machine, and so does not have human behaviors of tiredness and lack of concentration. For example: Computers which are used

for controlling the satellites.

(c) **Adaptability:** Modern Computers can be adapted to comply with different settings and environments. For example, they can be used as personal computers, for home use, banking, communication, entertainment, weather forecasting, space explorations, teaching, railways, medicine etc.

(d) **Artificial intelligence:** Computers are artificially intelligent i.e. They can be programmed to assume capabilities such as learning, reasoning, adaptation, and self-correction. For example computers can respond as if they were thinking by playing chess, recognize handwriting and speech. However, the computers themselves cannot think. The artificial intelligence is only supported by the power of the programs installed in them.

. (b) Briefly describe the concept of “**green computing**” regarding usage of computers in society. (1 mark)

Environmentally friendly Information and Communication Technology acquisition, installations, usage and disposal practices.

OR

This involves use of the computer without affecting or causing harm to the environment.

20. (a) Draw a line to link each element of a graphical user interface to its use. The first has been drawn for you. (3 marks)

Element	Use
Window	to click on to open an application
Icon	to display a set of choices to the user
Menu	to select an item on a screen
Pointer	to display tasks being worked on

(c) (i) What is the importance of creating shortcut icons when using a computer? (1 mark)

- Instead of duplicating a file in multiple places where it may be needed, one copy of the file can be kept in a centralized location and shortcuts created in different places can point to it. Double clicking on a shortcut is the same as double clicking on the target file/folder.
- They provide quick access to items even if they are far way – on a hard disk directory subfolder, on a network drive in another office or on a notebook PC that could be anywhere.
- They provide an easy way to launch programs, open folders, review documents, check printer operations and do countless other tasks by pressing a combination of keys.

(ii) Which of the following icons is a shortcut icon? (1 mark)



Icon A



Icon B



Icon C



Icon D

- **Icon D**