

S850/1

Subsidiary Information and

Communication Technology

Paper 1

2½ Hours

MARKING GUIDE

BEGINNING OF TERM ONE 2023

UGANDA ADVANCED CERTIFICATE OF EDUCATION

SUBSIDIARY ICT

1. Give five reasons why mobile phones should not be allowed in schools.

They can be used by students for cheating in examinations
They can be a source of inappropriate or wrong information
They are expensive to maintain and be serviced by students
Phones can cause insecurity in schools
Learners' concentration can easily be taken away by phones
Phones increase the rate of immoral behavior i.e pornography
Defamation of fellow students or staff
Can lead to digital divide
Hacking school systems becomes possible

2. (a) Explain the importance of servicing and maintenance of computers.

Improved functionality of computer hardware devices
Prevents critical damage of hardware devices
Improved speed of software components
To ensure that the computer works continuously
To ensure performance and efficiency of a computer.
To take out dust that can spoil the internal parts of the computer
In order to upgrade and update the computer.
To reduce the costs of long run replacement and repairs.
To prevent the computer from viruses and malware

(b) State any three activities involved in servicing and maintenance of computers.

- Repairing and replacing damaged parts.
- Upgrading software.
- Installing power guards/surge protectors.
- Scanning devices before use

- Disk cleaning
 - Emptying recycle bin
 - Firewall activation
 - Disk defragmentation
 - Upgrading software
 - Blowing dust off
 - Installing software
 - Covering computers with dust or water proof jackets.
- 3. Define the following terms as used in ICT**
- a) System unit**
It is a casing that houses the internal components of a computer
 - b) Ram chip**
A chip that temporarily holds data and instructions required during processing.
 - c) Power supply**
A computer hardware that converts AC to DC for computer use
 - d) Bus**
It is a communication system or pathway through which information travels to and from different parts of a computer.
 - e) Peripheral devices**
These are devices connected to the computer through ports
- 4. a) Define the term file extension**
This is a suffix attached at the end of a filename that identifies the type of file and the program that executes the file.
- b) Suggest possible file extensions for the following files.**
 - i) Audio file .mp3**
 - ii) Word documents .doc/ .docx**
- 5. a) state any three divisions of a computer keyboard**
Functional keys
Special keys
Navigation keys
Alphanumeric keys
- b) State the difference between backspace and delete key.**
Back space refers to a button that deletes particular characters when dealing with word processors while delete key erases particular content when using the general operating system commands like deleting folders, programs etc.
- 6. a) What are operating systems?**
Operating system is a type of system software that performs daily activities of a computer. These are programs that manage the computer resources.
- b) State the three major divisions of computer system software**
 - Operating systems
 - programming languages
 - Utility programs
- 7. List five examples of computer crimes committed across a computer network.**
Hacking

Spamming
Backdoor attacks
Denial of service attack
Eaves dropping

8. a) What is the work of a search engine to internet users?

Search engine is a system that takes in user keywords, looks for information on the World Wide Web and return a line of results (hits), usually in form of a mix of links to matching web pages

b) Give four examples of search engines commonly used.

Google search
Yahoo Search
Wikipedia
Baidu
Bing
Ask. Com

9. Explain the following forms of cell referencing

i) Mixed

Mixed cell referencing refers to the type of cell referencing which involves both absolute and relative cell reference in the same cell range.

ii) Relative

This is the type of cell referencing which changes cell range when the formula has been copied to another cell..

iii) Absolute

It is the type of cell referencing where the cell range remains constant when the formula has been copied to another cell.

b) Outline two qualities of a good graph in relation to a spreadsheet program.

10. A) State four health challenges a user is bound to face as a result of using a computer regularly.

Back pain
Wrist strain
Eye defects
Headache

b) Suggest a measure to overcome one of the above health problems.

Adopting a healthy sitting posture
Establishing breaks in computer usage time
Use of anti-glare screens on computers

11. Write the following ICT terms in full

i) IRC

Internet Relay Chat

ii) UPS

Uninterruptible Power Supply

iii) HTTP

Hyper Text Transfer Protocol

iv) HDMI

- High Definition Multimedia Interface
- v) **CMOS**
Complementary Metal Oxide Semi-Conductor

12. What are wireless networks?

Wireless networks are where data signals flow through the air

b) State four wireless transmission media

Microwaves
Radio waves
Bluetooth
Infrared
WIFI
Xender

13. Explain the following terms as used in presentation software.

i) Slide transition

It refers to the series of visual changes that appear in a presentation as you move from one slide to another

ii) Slide animation

Refers to particular visual changes that occur on particular text in a presentation

iii) Handouts

They refer to print outs from a presentation where more than one slide can be represented on the same page.

iv) Master slide

- Is the top slide in the hierarchy of slides that stores information about the theme and slide lay outs of presentation, including the background, color, fonts, effects, placeholders and positioning.

v) Slide template

This is a predesigned slide with special fonts, transitions, animations among others onto which changes are made to meet the required user preferences

14. a) distinguish between warm and cold booting

Warm booting is the process of restarting a computer that has initially been powered on while cold booting is the process of switching on a computer that has been powered off for some time

b) Under what circumstances may a person perform a warm boot?

When a computer freezes
After installation of new software
When a new hardware is installed
When the computer slows down
When a computer needs to recover from a deadlock

15. What is an icon in a desktop environment?

This is a graphical component on a desktop that helps identify the type of file or program on a computer.

b) State the four common icons on a normal computer desktop

My computer icon
Recycle bin icon
Folder icons
Windows button icon

16. a) mention two causes of system failure

Faulty hardware
Dust and dirt
Electrical interference
Improper drivers
Data corruption

b) State the difference between software update and software upgrade.

A software update is typically a release containing enhancements to the current version.
Software upgrade is a whole new version of software that represents a significant change or major improvement.

c) Give one way system failure can be controlled

Regular servicing of computer components.

17. Many companies use video conferencing instead of face to face conferencing.

i) Mention three advantages of video conferencing

Saves time
Saves transport costs

ii) Explain two disadvantages of video conferencing

It is limited by internet availability
Special ICT tools are required to have it enabled

18. A) define the term digital forensics

Digital forensic refers to the science encompassing the recovery and investigation of material found in digital devices often in relation to computer crime.

B) Mention two causes of signal attenuation

Long distance
Weak transmission media

C) Mention two biometric devices

Iris scanner
Finger print scanner
Voice recognition reader
Hand geometry system
Signature verification system

19. State two factors to consider before buying a software program

- the cost of the package
- compatibility with your current platform
- availability of software updates
- storage requirements

b) Mention three ways computer users can obtain software.

Through buying it and customizing it
Through building the software
Through downloading executable software files
Through leasing from companies

20. List five ways you can make a document look attractive and professional.

Italicizing
Underlining special text

Attachment of page borders
Bolding special text
Change of font style