UGANDA NATIONAL EXAMINATION BOARD

SUBSIDIARY ICT S850/1

UACE 2016 DRAFT MARKING GUIDE

1. (a) Reasons why mobile phones should not be allowed in secondary school

- 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 ponoraphy
- 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) Explaining the importance of servicing and maintenance of computers

- To prolong the life span of hardware and software.
- To ensure the proper functioning of the computer.
- To update outdated software programs such as antivirus, Operating System, application software.
- To increase the efficiency of the computer.
- To increase functionality of the computer.
- To remove faulty hardware and replace with new ones thus preventing system failure

(b) 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 and
- Covering computers with dust or water proof jackets.

3 (a) The stating of the file path

Z:\Documents and Settings\All users\Documents\My Videos

(b). Description of method of recovering an accidentally deleted folder from the desktop

- On the keyboard press Ctrl + Z
- Open the recycle bin>Right click on the deleted folder> select Restore
- Run the recovery utility > select deleted folder>select destination>click restore
- Right click on any space on desktop>shortcut menu appears> click undo delete
- Open the recycle bin, then cut and paste on desktop
- Open the recycle bin and drag the file to the desktop

4. Description of ICT terms

(a) System unit: Is an enclosure that contains most of the computer components

Is a casing or box that houses the internal electronic components.

(b) Ram chip: A primary data storage device which allows data to be accessed at a high speed in any order.

A working memory of a computer which stores data temporarily.

(c) Power supply: A device that supplies the required amount of power to all components of a computer.

It is a computer hardware that converts AC to DC for computer use

(d) Bus: A communication system/highway/shared flow/path through which data/information/instructions travels to and from different parts of a computer.

(e) Peripheral devices: Electronic equipment or devices connected from outside the computer and even if removed the computer continues to work.

Components that are attached or removed to increase computer efficiency.

5 (a) Definition of file extension

This is a suffixgroup of letters occurring after the period in the file name indicating the purpose/ type/ format of the file contents Or

Refers to the last three/four/five characters after a period(.) that make up the entire file name.

(b) Files extensions for the following

(i) Audio file .MP3, .WMA, .WAV, .FLS, .MP4A, .AUX, .AIF, .AUD, .CDA, AU.

(ii) Word documents .Doc, .Docx

6 (a) Definition of an output device

A hardware component that allows a user to display/convey/show the progress of result processing or information.

(b) Categories of printers with examples

(i) Impact printers

Examples Dot matrix, Daisy wheel, drum, braille

(ii) Non-impact printers

Examples Laser jet printer, Deskjet printer, inkjet printer, thermal printer, bubble jet printer

7 (a) Distinction between system software and application software

System software refers to the programs/instructions designed to manage the operation of computers and avail computer resources to the users while

Application software is a program designed to enable a user to accomplish specific task(s).

(b) Types of language processors

Interpreters

Compilers

Assemblers

8 (a) Differentiate between computer hardware and computer software

Computer hardware is any physical part of a computer that can be touched and seen

While

Computer software is the set of computer programs that provide instructions to computer hardware.

(b) Listing three categories of computer hardware apart from storage

- Input devices
- Output devices
- Processing devices
- Communication devices

9. (a) Public domain software is copyrighted – FALSE

Off-the-shelf software is developed and sold for profit –TRUE

Source codes of open source software programs are only available to paid up subscribers – FALSE

Shareware programs are widely available from a variety of downloaded sites on the internet – TRUE

Freeware programs are frequently developed by only amateur programmers – FALSE

10 (a) Definition of a motherboard: 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) Identification of components housed on the motherboard.

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

11(a) Definition of terms as used in publications

(i) Frame: A feature that enables a user to fit in the required text or image of the required dimension.

(ii)Template: 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) Listing desktop publication software

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

(c) Naming a document that can be produced using publication software

- Brochure
- Cards
- Certificates
- Calendars
- Posters
- Flyers
- Banners
- Webpage
- Newsletter

12. Completing the table

Word processing Used to create, edit, format, save and print documents

Spreadsheet Used to organize data in rows and columns and also perform calculations

Database Management System Used to organize data in a way that allows to access, retrieve and make use of that data. Develop and manage database.

Desktop publishing software Used to design/create publications

13. Ways of protecting data and software

- Make backup copies of data regularly
- Minimise the number of vistors in the computer laboratory
- Destroy all the print materials that may not be required
- Install and regularly update antivirus software
- Scan external storage sources with updated antivirus software
- Use power backup/stabliser to avoid system crash

- Activate firewall to restrict unauthoprised access to computer resources especially on computer networks.
- Use online storage or cyber storage or cloud storage
- Data masking
- Senstising the public about safety data measures
- Burglar proofing of the computer rooms
- Use passwords on computer logins
- Encrypt data
- Use level authentication for sensitive data
- Hide files/folders
- Electronically erase data

14(a).

- Unlikely to be lost
- Faster to arrive
- Allows sending messages to several people at a time
- Cheaper in terms of costs involved
- Messages can be sent at any time anywhere
- Allows sending multimedia format documents
- Less prone to illegal access
- Several documents can be sent at once

(b)

- It is good /convenient for sending physical items
- Good for sending legally binding documents
- Convenient for sending bulky/large documents
- It is a cheaper method of sending documents
- It offers a safer delivery of sent documents
- Documents can be tracked while in transit
- Tere is a possibility of checking the documents before sending during transit or at the destination for security purposes
- It is a convenient for all categories of people
- It provise employment opportunities to people involved
- It offers infrastructure development in terms of paying taxes

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(a) Simulation

(b) WIFI

(c) Bluetooth

(d) Virtual reality

(e) Artificaial intelligence

a) A hyper link is a built in connection to another realted page or part of a webpage which can be a text or image while

b) 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

16 (b)

Netiquette guidelines while using internet

- Keep message brief and use proper grammar and spellings
- Be careful when using sarcasm and humor
- 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

17 (a) IRDA (infrared data Association)

Microwave

Broadcast Radio or radio waves

- Some are not designed for high speed data transfer
- They have a limited range of communication (distance)
- Some devices do not have profiles compatible with devices you want to connect with
- Susceptible to interference and dilution
- More prone to hackers
- Initial costs of setting up and mantainance are high
- Requires expertise or skilled personnel to configure/administer

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a) Watermark

b) Mail merge

c) Indent

d) Bookmark

e) Cursor

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a) Communication is the exchange of information between devices

It also refers to the process of sending and receiving information through a communication channel/path

b) A network is an interconnection of computers and network devices to enable communication and resource sharing

c) A protocol is a set rules/standards/regulations governing/guiding communication over a network

d) A modem is a device that translates analog signals to digital signals and from digital to analog.

A combined device for modulation and demodulation

(e) A bandwidth is the amount of data that can be transmitted at a time

- It also refers to the rate of data transmission
- It refers to the range of frequencies in a given transmission medium
- It is a maximum throughput of a transmission medium

20.

- Facilitates internal emails
- Provides access to company contacts information, procedure manual and other frequently updated documents
- Used for posting and updating employee forms
- Posting internal job listings
- Provides electronic catalogs for ordering supplies
- Facilitates collaborative computing
- Scheduling meeting and appointments
- Posting financial statements and other types of corporate information
- Maintains shared calendars, projects timelines and other project documents
- Provides access to company databases and other systems
- For monitoring internal security