

**WAKISSHA JOINT MOCK EXAMINATIONS**  
**MARKING GUIDE**  
**Uganda Advanced Certificate of Education**  
**UACE August 2017**  
**SUB –I.C.T S850/1**



1.
  - a) Differentiate green computing from cloud computing. (01 mark)  
 Green computing relate to computing practices which are environmentally friendly. Whereas cloud computing involves execution of organizationalactivities through computer networks.  
 Award a mark when both computers are ok.
  - b). State four elements of green computing (04 marks)
    - a) Environmental saving activities – Proper disposal of IT.  
 - Switching off computers while not in use.
    - b) Electronic products environmental assessment (EPEAT) tools for IT firms
    - c) Green computing groups/associations - Use of LCD monitors instead of CRT monitors.
    - d) Software products like Little Green Genie, which monitor and reduce on the impact of carbon circulation in the air.– Use of energy saving devices.
 Award one mark to any correct one answer or element stated i.e (4 x 1) marks.
2. Thebooting process has got several backend processes to attainment of the computers run-time environment. Backend processed are those invisible processes that take place without you seeing them directly.
  - a) Explain three backend booting processes.
 

<ol style="list-style-type: none"> <li>i). Post (power on self-Test)</li> <li>ii). B.O.S execution.</li> <li>iii). Power on reset.</li> <li>iv). CMOS configuration and checkup</li> <li>v). Loading the operating system.</li> <li>vi). Memory checkup.</li> </ol>	}	Award a mark for any one correct process
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 Any 3 x 1 marks
  - b) Give situations that can necessitate a computer system reboot.
    - Improper connection of peripheral devices and fixing of some chips like ram chips on the mother board,
    - Program bugs.
    - After updating the system.
    - After installing new software.
    - Power interruptions like power fluctuations or power flux.
    - Sometimes after completion scanning of a virus boot sector.
    - Accumulation of viruses may cause interruptions relating to restarting a computer.
    - During installation of an operating system.
    - Improper bios setting may cause system restart for example power saving mode settings.
    - After applying some settings like device driver update.
    - After uninstalling a program.
    - In case the connected device/ hardware is not recognized.
    - When switching from one operating system to another.

- When restoring earlier system dates.
- When the computer slows down.
- After changing the CMOS / BIOS setup.
- When a computer freezes.

**Award marks to any two correct situations i.e any 2 x 1 marks**

3. Distinguish between a folder and a file (02 marks)

- **A folder** is virtual container or store for files while a file is blockarbitrary/subjective information that give an account of the contents about it.

**A file** is also a collection of data with related records.

A folder is a container of related file.

A file is an object on a computer that stores data or information.

**Award one mark for any correct concept but if the student gets both concepts correct, then award 2 marks.**

**Avoid using reserved words like name, DOB etc.**

b). Give three rules that must be followed whenever naming a file of a folder. (03marks)

Use clear names or labels that cannot easily be forgotten.

- Try to use short lengthy characters when naming your files/folders.
- Avoid using some symbols that relate with mathematical operators as they
- Confuse the computer.
- Do not use similar identities to name different files /folders.
- Avoid hierarchy complex structures.
- Use underscore to delimit and avoid wild cards.
- You may also use a hyphen instead of an underscore to delimit names.
- If you're naming files using dates, the order of importance role should be respected e.g year / month / Date (XY/MM/DD).

Any 2 x 1 mark.

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c) Write a saving criteria for MS power point file 2003 " mocks" in a folder called WAKISSHA which is located on a local drive D.

**Note:** No mark shall be awarded to any student who fails any one of the concepts in the steps.

- Click file,
- Save or save as,
- Browse and choose D,
- Look for folder WAKISSHA open it,
- Give file name moody,
- Click save or press enter.

01 mark for correct steps.

4. (a)

- i). - Notifies incase of any intruder.
- ii). - Scares intruder.
- Alerts users of any disaster like fire outbreaks.

Any 2 x 1 mark

(b)

- i). Maintain its efficiency.
- ii). Reduces extra costs.
- iii). Maintain computer speed/ improves on computer speed.
- iv). Avoid rusting and wearing out of hardware parts.
- v). Maintain durability.
- vi). Not to lose any important files in case of viruses and crashing of the hard disk.
- vii). To enable data recovery.
- viii). To remove dust.
- ix). To upgrade and update the computer system.

Any 3 x 1 marks.

5. (a) Editing is putting something into acceptable form. or  
Is making necessary changes to an existing document

***While***

Proof reading is checking for errors.

You can distinguish by feature, process or definition.

**Award 2 marks when both  
concepts correct on one mark  
for each correct concept.**

(b)

- i). Copy.
- ii). Paste.
- iii). Cut/ move
- iv). Auto correct.
- v). Spelling and grammar checker.
- vi). Thesaurus.
- vii). Find and replace.

Any 3 x 1 mark

6. a) Buffer –is part of RAM that temporarily stores data waiting to be sent to a device.  
Register –is a temporary storage in the CPU that holds data before and after processing.

b)

- i). It is volatile.
- ii). It is read and write.
- iii). Can be increased.
- iv). It is biggest percentage of primary memory.
- v). It is not installed at factory level but by the user.
- vi). It determines the speed of a computer.

Any 3 x 1 mark

7. (a) - Utility program is one which is used to enhance, analyze and optimize the Computer performance.  
- Is a program that provides additional functions to the operating system.  
- Service utility is a program that manages specific tasks of a computer.
- (b) (i) Disk defragmentation.  
- Reorganization of storage space of the hard disk.  
- Re-arranging scattered files or folders on the hard disk.

- (ii) Disk partitioning.
- It is dividing electronically the physical hard disk into two or more divisions or slices.
  - Is the division of the hard disk into many logical drives.
- (iii) Disk compression
- It is increase the capacity of the disk.
  - Increase the amount of information that can be stored on a hard drive of given size.
- Any 1 x 1 mark

8. The following is a sample of pay roll. The work sheet row and column readings are marked 1, 2, 3.....and A, B, C.....respectively

	A	B	C	D	E	F	G	H
1 .	NAME	HOURS WORKED	PAY PER HOUR	BASIC PAY	ALLOWENCE	GROSS PAY	TAX REDUCTION	NET PAY
2	MUGAGGA	12	1500					
3	BOKIRO	28	650					
4	SENTONGO	26	450					
5	KABANDA	30	900					
6	KANNEEMU	18	350					
7	TEBYASA	22.5	500					
8	WANYAMA	17	250					
9	MAGUFULI	33	180					
10	TOTALS							

Use the following expression to answer the questions that follow:

- Basic copy = Hours worked x pay per hour
- Allowance is allocated at 10% of basic pay.
- Gross pay ^ Basic pay + Allowances.
- Tax deductions are calculated at 20% of gross pay
- Net pay = Gross pay-Tax deduction

**Write formula using cell references for the following**

**Note:** A student who uses a multiplication sign (X) is wrong.

- Students should strictly use formulae and not functions.
- a)  $d2 = b2 * c2$  or  $= c2 * b2$
- b)  $£4 = d4 * 0.1$  or  $= d4 * 10\%$  or  $= 10\% \times d4$  or  $d4 \times 10 / 100$
- c)  $F9 = D9 + E9$  or  $= E9 + D9$
- d)  $G7 = F7 * 0.2$  or  $= F7 * 0.2$
- e)  $HS = f5FS - GS$ .

01 mark per formula

9. a) Data communication is the electronic transmission of information from one computer to another through a transmission medium. 02 marks
- (b) Network protocol is set of rules and procedures for exchanging information among computers on a network while internet protocol is a set of rules that govern transmission of data on interment.
- A ward one mark for any one correct concent.
- (c) Role of telephone line.
- It is a path or channel over which data or signals go through during data communication.

- It's a channel over which data or signals go through.
- It's a link.

01 mark

10.

- |      |        |                                    |
|------|--------|------------------------------------|
| i)   | True.  | } 01 mark for each current answer. |
| ii)  | False. |                                    |
| iii) | False. |                                    |
| iv)  | True.  |                                    |
| v)   | True.  |                                    |

11. a) Briefly explain the following terms as used in internetbased technology

- (i) Handle
- It is a host identification
  - It's a name of a user or device communicating.
  - Is and online name for an internet user
- (1 mark).

- (ii) Blog
- Is a personal online journal for personal opinions/ideas
  - Is a daily which carries personal data.(1 mark)

- (iii) Wiki
- Computer based public websites/platforms, through which people create, share, discuss/exchange, and modify user-generated content.

- (b) Write the following in full 1 mark @ (02 marks)
- LED     light emitting diode. 1 mk
- AGP     - Accelerated Graphics port 1mk
- Advanced graphics process or
  - Advanced graphics port.

12. (a) A social networking website –is an online platform that is used by people to build social relationships with others and to share relationships with others and to share similar personnel or career interests, activities etc.

- Is a site that enable people to share information instantly.    01 mk

(b)

- |       |            |                |
|-------|------------|----------------|
| i)    | Face book. | Any 2 x 1 mark |
| ii)   | Whats App. |                |
| iii)  | Imo.       |                |
| iv)   | Viber.     |                |
| v)    | Instagram. |                |
| vi)   | Twitter.   |                |
| vii)  | LinkedIn.  |                |
| viii) | Pinterest. |                |
| ix)   | Snap chat. |                |

c)

- i) Hacking.
- ii) Misleading information.
- iii) Pornography.
- iv) Cyber Bullying.

- v) Time wastage.
- vi) Addition.
- vii) Causes major relationships problems.
- viii) Decreases face to face interaction.
- ix) Facilitates laziness.
- x) Diminishes understanding. Any 2 x 1 mark
- xi)

13.

- i) Simplex.
- ii) Customized programs.
- iii) Public domain.
- iv) Object code.
- v) Graphic user interface. 01 mark for each correct ans.

14. a) Information privacy is the ability of an individual or group to stop anybody from having commercial advantages over certain information.

- Is the ability of an individual or organization to determine what data can be accessed by the hardparty.

b)

- i) Computer runs slower than usual.
- ii) Computer stops responding or locks up frequently.
- iii) Computer restarts on its own.- unusual/strange errors.
- iv) Applications on the computer do not work correctly.
- v) Computers restarting on its own.
- vi) Disk or disk drives are inaccessible.
- vii) Unusual/quizzical or strange error messages.
- viii) Popup messages.
- ix) Computer running out of disk space.
- x) Frequent freezing of computers.
- xi) Crashing of hard disks. Any 2 x 1 mark

c)

- i) Installation of updated antivirus programs.
- ii) Regular scanning.
- iii) Creating of passwords. To limit access.
- iv) Data, backup.
- v) Scanning external storage mediums before opening them.
- vi) Turning on firewalls.
- vii) Using updated soft wares.
- viii) Ensure sure networks used.

Any 2 x 1 mark

15. a) **Group ware –is a collaborative or application software designed to help people involved in a common task to achieve their goals.**

b) Hardware is an email message that has been returned to the sender because the recipients address is invalid. While software bounce is an email message sent and reaches the server but fails to reach the recipient because the mail box was full.

c)

- i) Total lack of face to face interaction.
- ii) High initial costs of setting it up.
- iii) Damage with the server affects the entire process.
- iv) Leisure time at home may be replaced by work.
- v)
- vi) Data security may be jeopardized.
- vii)
- viii)
- ix)

16. a) Distinguish between the following ICT securities related concepts;

i) Cracking from hacking

- Hacking involves unauthorized access into the computer system. It can be legal or illegal. Whereas cracking involves tampering with security codes of a software product or file for personal gains.

(1 mark)

ii) Eavesdropping from denial of service attack

Eavesdropping involves secretly spying onto one's computer activities physically or by use of spyware. Whereas denial of service attack involves engaging a network user to deny him/her the right of using the network line.

(1 mark)

iii) Virus from a worm

- A Virus is a potentially damaging computer program malware, while a Worm is a malware that copies itself repeatedly, using up resources and possibly shutting down computer or network (1 mark)

iv) Digital forensics from artificial intelligence

- Artificial intelligence is the process of building computer systems that simulate human thought processes and actions. Whereas digital forensics is an ICT career involving the recovery and investigation of material found in digital devices, often in relation to computer crime.

b) Give **one** example of biometric devices

- Mouse finger print scanner
- Door scanner
- Facial scanner
- Computer scanner
- Signature verification scanner
- Iris scanner
- Finger print scanner
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17.
  - a) is the digital publication of electronic articles and e –books or Electronic publishing means posting information in an electronic form through online means.
  - b)
    - i) Rotate –it selects and turn around the selected graphic
    - ii) Crope –it trims imported graphic.
  - c)
    - i) Newsletters.
    - ii) E.journals.
    - iii) E.book.
    - iv) Online magazine.
    - v) Online newspapers.
    - vi)
    - vii)
    - viii)
    - ix)
  
18.
  - a) Expansion slots are sockets in the mother board into which expansion cards are plugged /inserted.
    - Expansion cards are electronic cards that are inserted into expansion slots on the motherboard.
  - b)
    - i) Sound cards.
    - ii) VGA cards.
    - iii) NIC.
    - iv)
    - v)
    - vi)
    - vii)
  - c) – is an electrical channel that allows curious devices and attachments to the system unit to communicate with each. Or
    - Set of signal pathways that allow information to travel between components inside or outside of a computer.
  
19.
  - a) – Machine cycle –is the basic operation performed by a central processing unit.
    - Is a sequence of steps performed continuously at a rate of millions per second while a computer is in operation.
  - b)
    - i) Fetching.
    - ii) Decoding.
    - iii) Execution.
    - iv) Storing.
    - v)
    - vi)
    - vii)
  
20.
  - a) Loss of signal strength having travelled for a long distance.



- b)
  - i) Distance.
  - ii) Quality of transmission media.
  - iii) Interference.
  - iv)
  - v)
  - vi)
  - vii)
- c) Guided communication means having connectivity between a source and destination using cables or wires while unguided communication is connectivity between a source and destination without cables or wires.

**END**