

## WAKISSHA MARKING GUIDE 2017

1. a) Differentiate between green computing and cloud computing. (01 mark)

*Cloud computing is Internet-based computing, whereby shared resources e.g hardware, software and information are provided to other devices on-demand.*

**While**

*Green Computing refers to sustainable use of computing resources to the environment.*

- b) State four elements of green computing. (04 marks)

- *Green use- Use energy saving machines*
- *Green Manufacture- Companies should manufacture computers and machines that promote green computing*
- *Green Disposal- Ensuring proper disposal of electronic waste*
- *Recyclability- Ensuring recycling old machines and computers*

2. The booting process has got several backend processes to the attainment of the computers run time environment.

- a) Explain three backend booting processes. (03 marks)

- *Power On Self-Test (POST)*
- *Power On Reset*
- *Loading of the Operating system into RAM*
- *Memory check-up*
- *CMOS configuration and Check-up*

**Any 3x1 =03 marks**

- (b) Give two situations that can necessitate a computer system reboot. (02 marks)

- *After installing a hardware device to the computer*
- *To recover from errors and system repair*
- *After installing a new software*
- *After upgrading the operating system software*
- *Power interruptions like power fluctuations*
- *During installation of operating system*
- *Improper connections of hardware devices*
- *When a computer is affected by a virus*

**Any 2x1= (02 marks)**

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

*A **file** is a collection of logically related records. Or It is an object on a computer that stores data, information, settings, or commands used with a computer program. While*

***Folder**-This is a virtual container in a computer's file system in which groups of files and other folders are kept and organized. Or It's a virtual storage area of a file, a program etc on a computer*

*Any two correct -02 marks*

**b) Give two rules that must be followed whenever naming a file or folder.**

**(02 marks)**

- *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.*

*Any 2x1 = 02 marks*

**c) Write a saving criteria for Ms PowerPoint file 2003 “mocks” in a folder**

**called Wakissha which is located on local drive D.**

**(01 mark)**

- *Click file /Open,*
- *Save or save as,*
- *Browse and choose D,*
- *Look for folder called WAKISSHA open it,*
- *Give file name mocks*
- *Click Save or press enter.*

*All correct =01 mark*

**4. a) State two reasons why an alarm system is important in a computer laboratory. (02 marks)**

- *Notifies the administrators in case of any intruder*
- *Scares any intruder*
- *Alerts the users of any disaster like fire outbreak.*

**Any 2x1 = 02 marks**

**b) Give three reasons for servicing computers. (03 marks)**

- *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*

**Any 3x1 =03 marks**

**5. a) Distinguish between Editing and proof reading. (02 marks)**

*Editing is the making of relevant changes and modifications to the document*

*While*

*Proof reading is the checking for errors on the document usually done to ensure comparison between the hard and soft copy.*

**Any two definitions correct= 02 marks**

**b) Explain three editing features used in word processing. (03 marks)**

- *Copy and Paste*
- *Spelling and grammar checker*
- *Find and replace*
- *Auto correct*
- *Thesaurus*

**Any 3x1 =03 marks**

**6. a) What is the difference between a buffer and a register? (02 marks)**

*Buffer is a part of Random Access Memory that stores data temporarily waiting to be sent to the device While*

*Register is a temporary location in the Central Processing Unit that holds data during and after processing.*

**Any 2 correct =02 marks**

**b) List down three characteristics of main memory. (03 marks)**

- *It is volatile*
- *It is read and write*
- *Can be increased*
- *It is the biggest percentage of primary memory*
- *It is not installed at factory*

**Any 3x1=03 marks**

**7. a) Define the term Service utility. (02 marks)**

*Utility program is one which is used to enhance, analyze and optimize the Computer performance*

*This is a program that provides additional functions to the operating system.*

*Service utility is a program that manages specific tasks of a computer.*

**Any of 1x2 =02 marks**

**b) Write brief notes about the following terms.**

**(i) Disk defragmentation. (01 mark)**

- *Reorganization of storage space on the hard disk*
- *Re- arranges all scattered files or folders on the hard disk*

**(ii) Disk partitioning. (01 mark)**

- *This refers to the process of dividing the hard disk into partitions, or slices*
- *This is the division of the hard disk into many logical drives*

**(iii) Disk compression. (01 mark)**

- *It increases on the size of the hard disk*
- *It increase on the amount of space for storing information*

8. The following is a sample of a payroll. 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	ALLOWANCES	GROSS PAY	TAX DEDUCTION	NET PAY
2	MUGAGGA	12	1500					
3	BOKIRO	28	650					
4	SSENTONGO	26	450					
5	KABANDA	30	900					
6	KANNEMU	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 pay = Hours worked x pay per hour.
- Allowance is allocated at 10% of basic pay.
- Gross pay= Basic + Allowances.
- Tax deductions are calculated at 20% of gross pay.
- Net pay=Gross pay- Tax deduction.

Write formula using a cell references for the following. (05 marks)

a)  $D2 = B2 * C2$

b)  $E4 = D4 * 10\%$

c)  $F9 = D9 + E9$

d)  $G7 = F7 * 0.2$

e)  $H5 = F5 - G5$

Any 5x1 =05 marks

9. a). Define data communication. (02 marks)

*This is process through which one computer transfers data, instructions and information from one computer to another via transmission media*

Any 1 correct =01 mark

**b). Differentiate between Network protocol and internet protocol.**

**(02 marks)**

*Network protocol* refers to a set of rules and procedures that govern exchange and transmission of data over a network **While**

*Internet Protocol* refers to a set of rules and procedures that govern exchange of data over the internet.

Any 2 correct = 02 marks

**c). Explain the role of the telephone line in internet connectivity?**

**(01 mark)**

- *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*

Any 1x1=01 mark

**10. Write true or false for the following statements.**

**(05 marks)**

	Statement	True/False
(i)	The more the pixel per square inch on a computer monitor, the higher the resolution.	TRUE
(ii)	Dot matrix printers produce better images than inkjet printers.	FALSE
(iii)	A PDA is larger than a Desktop computer.	FALSE
(iv)	A number pad is used to enter a PIN	TRUE
(v)	A graphical user interface uses icons to represent application	TRUE

**11. a) Briefly explain the following terms as used in internet based technology.**

**(i) Handle.**

**(01 mark)**

- *It is a host identification*
- *It's a name of a user or device communicating.*
- *Is and online name for an internet user*

**(ii) Blog.** **(01 mark)**

- *Is a personal online journal for personal opinions/ideas*
- *Is a daily which carries personal data.*

**(iii) Wiki.** **(01 mark)**

*Computer based public websites/platforms; through which people create, share, discuss/exchange, and modify user-generated content*

**b) Write the following abbreviations in full**

**a) LED;**

*Light Emitting Diode*

**b) AGP;**

*Accelerated Graphics Port*

**12. a) What is a social networking website?** **(01 mark)**

*This is an online platform/ website that is used to create relationships, create user profiles, communicate, share multimedia.*

**b) List two examples of social networking websites.** **(02 marks)**

- *Instagram*
- *Facebook*
- *Whatsapp*
- *Linkden*
- *Skype*
- *Telegram*
- *Twitter*

**Any 2x1 = 02 marks**

**c) State two disadvantages of social networking websites.** **(02 marks)**

- *Decreases face to face interactions*
- *Consumes a lot of time*
- *Expensive to maintain/ buying internet bundles*
- *Causes addiction and social isolation*
- *Hacking*
- *Defamation*
- *Facilitates laziness*

Any 2x1 = 02 marks

13. Use the phrases in the list below to complete the statements.

(05 marks)

- Public domain software
- Share ware
- Customized Software
- Firm ware
- Command line interface
- Graphical user interface
- Object code
- Simplex channel

a) Simplex channel is a single directional communication method.

b) Programs tailored to meet particular users' needs are customized software

c) Public domain is a software donated freely and has no copyright restrictions.

d). A stored logic is also referred to as object code

e). The interface that represents more pictures on the screen is Graphical user Interface

14. a) Define information privacy.

(01 mark)

*Information privacy is the ability of an individual or group to stop anybody from having commercial advantage over certain information. OR  
Is the ability of an individual or organization to determine what data can be accessed by the third party*

b) State two symptoms of computer virus.

(02 marks)

- *The computer slows down*
- *Frequent freezing of the computer*
- *Crashing of the hard disk*
- *Computer locks up frequently*
- *Computer restarts itself*



- *Disk drives become inaccessible*

**Any 2x1=02 marks**

**c) Mention two precautions taken to control computer viruses. (02 marks)**

- *Installing anti-virus software*
- *Regular scanning of the compute*
- *Backup data regularly*
- *Turning on firewalls*
- *Installing software from trusted sources*

**Any 2x = 02 marks**

**15. a) Define group ware. (01 mark)**

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

**b) Differentiate between a hard bounce and a soft bounce as applied to emails.**

**(02 marks)**

***Hard bounce** is an email message that has been returned to the sender because the recipients address is invalid While*

***Soft bounce** is an email message sent and reaches the server but fails to reach the recipient because the recent mail box was full.*

**c). Mention two dangers of using computers to enhance telecommuting.**

**(02 marks)**

- *Damage with the server affects the entire process*
- *Initial cost to set it up*
- *Leisure time may be replaced with work time*
- *Data security may be jeopardized*

**Any 2x1 =02 marks**

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

**i) Cracking and hacking.**

**(01 mark)**

***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.*

**ii) Eavesdropping and denial of service attack.**

**(01 mark)**

***Eavesdropping** involves secretly spying onto one's computer activities physically or by use of spyware. **While***

***Denial Of Service** attack involves engaging a network user to deny him/her the right of using the network line.*

**iii) Virus and a worm.**

**(01 mark)**

*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.*

**iv) Digital forensics and artificial intelligence.**

**(01 mark)**

***Digital forensics** is the art of science involving the recovery and investigation of material found in digital devices, often in relation to computer crime **While***

***Artificial intelligence** is the process of building computer systems that simulate human thought processes and actions.*

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

**(01 mark)**

- *Finger print scanner*
- *Iris recognition system*
- *Face recognition scanner*
- *Hand geometry scanner*
- *Signature verification*

**Any 2x1 =02 marks**

**17. a) Define desktop publishing. (01 mark)**

*Desktop publishing: is the production and designing publications with advanced features and graphics by use of the computers. The publications include newsletters, business cards, brochures, invitation cards and like.*

**b) Explain the following graphic terms. (02 marks)**

**i) Rotate.**

- *Is a feature that allows circular movement of an object around the centre*
- *It selects and turn around the selected graphic*

**ii) Crop.**

- *It's a feature that removes the unwanted parts of the image.*
- *It trims imported graphic.*

**c) Name two examples of desktop publications. (02 marks)**

- *Business cards*
- *Identity cards*
- *Brochures*
- *Fliers*
- *Book Covers*
- *Calendars*

**18. a) Distinguish between expansion slots and expansion cards as applied in ICT. (02 marks)**

*Expansion slots are sockets in the mother board into which expansion cards are plugged /inserted. While Expansion cards are circuits boards inserted into expansion slots.*

**b) Give two examples of expansion cards. (02 marks)**

- *Sound cards*
- *VGA cards*
- *Video Cards*

- *Network Interface Card*

**c) Give one function of a bus. (01 mark)**

*This is an electrical path that allows communication between devices and components connected on the computer.*

**19. a) Define the term machine cycle. (01 mark)**

*Machine cycle is a sequence of steps performed continuously at a rate of millions per second while a computer is in operation*

*Machine cycle is a set of basic operations a processor repeats for every instruction.*

**b) Briefly explain the four stages involved in the machine cycle. (04 marks)**

- (a) **Step 1: Fetching the instruction.** *The instruction to be executed is obtained from memory.*
- (b) **Step 2: Decoding the instruction.** *The instruction is translated into commands the computer understand and sent to the ALU.*
- (c) **Step 3: Executing the instruction.** *The commands are carried out.*
- (d) **Step 4: Storing results.** *The results are stored in registers or memory.*

**20. a) Explain the meaning of the term “Attenuation in relation to data transmission. (01 mark)**

*This is the loss of signal strength especially after moving long distances.*

**b) Mention two cases that may bring about attenuation in communication networks. (02 marks)**

- *Signals moving long distances*
- *Physical obstacles*
- *Weather conditions*
- *Cross over by wires*
- *Magnetism to transmission media*
- *Quality of the transmission media*

c) Give two differences between guided and unguided communication. (02 marks)

*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 cable or wires.

**END**