JINJA JOINT EXAMINATIONS BOARD

MOCK EXAMINATIONS 2019

S850/1 SUB ICT

MARKING GUIDE

1. (a). State **two** activities carried out during the data input stage during data processing. (02 marks)

* *Data collection.*
* *Data sorting / grading.*
* *Data entry.*
* *Data verification.*

(b). Write **ICT** in full. (01 mark)

* *Information communication and technology.*

(c). Give **two** system specifications you would consider before buying a computer. (02 marks)

* *Processor speed.*
* *Size of hard disk.*
* *Amount of RAM.*
* *Screen resolution.*
* *Screen size.*
* *Amount of power consumption.*
* *Pre-installed operating systems.*

1. (a). Distinguish between **servicing** and **repairing** as used in relation to computer use. (02 marks)

*Computer* **servicing** *refers to doing overall maintenance activities on a computer (both hardware and software),*

*while;*

*Computer* **repair** *refers to the overall activities that are carried out to put back life in a computer not working.*

(b). Identify **two** safety precautions for computer users. (02 marks)

* *All cables should be insulated to avoid short circuit.*
* *Cables should be laid away from path ways*
* *Furniture provided should be standard to avoid bad sitting posture*
* *Antiglare screens should be provided to screens to avoid too much direct light.*
* *The room should be properly ventilated and windows opened whenever the computers are in use to create good air circulation*
* *The walls of the comp room/lab should not be painted with over bright reflective oil paints.*
* *Overcrowding should not be allowed as it may cause suffocation.*

(c). State **one** reason for creating a hard disk partition on a computer. (01 mark)

* *Better organize your data. As we all know, partitioning a hard disk will provide you with several separate logical drives.*
* *Run different operating systems on one PC.*
* *Reduce the threats of data loss.*
* *More convenient for backup and restore.*
* *More selective when encrypting drive.*
* *Improve performance.*

1. (a). State **two** activities that can be carried out on a file. (02 marks)

* *Opening.*
* *Closing.*
* *Printing.*
* *Copying.*
* *Deleting.*
* *Sending a file.*
* *Compressing a file.*
* *Moving a file.*
* *Renaming a file.*
* *Finding file properties.*
* *Scanning a file.*
* *Creating a new file.*

(b). Prepare a check list of **two** requirements of a good file password. (02 marks)

* *Characters or More*
* *Mixed and Matched Caps, Symbols, and Numbers*
* *No Obvious Substitutions*
* *Not in the Dictionary*
* *Doesn’t Contain Names*
* *Doesn’t Contain Phone or Address Numbers*
* *Not Saved by the Browser*
* *Not Shared with Anyone*
* *Written down in a Safe Location*
* *Unique*

(c). Give **one** way a file that has been accidently deleted can be brought back. (01 mark)

* *Press Ctr + Z.*
* *Open recycle bin, locate and select the file, then click restore.*

1. (a). Select **one** term to fill in the spaces provided for (i) to (iii) sub sections below.

(i). *Input.* (01 mark)

(ii). *Processing.* (01 mark)

(iii). *Output.* (01 mark)

(b). State **two** parts that make up the Central Processing Unit. (02 marks)

* *Control Unit.*
* *Arithmetic Logic Unit.*
* *Registers.*

1. (a). Define the term **computer software**. (02 marks)

* *Computer* **Software***is a collection of instructions that enable the user to interact with a computer, its hardware, or perform tasks.*

(b). Outlie **two**qualities of a good application software program. (02 marks)

* *Functionality*
* *Reliability*
* *Usability*
* *Efficiency*
* *Maintainability*
* *Portability*

(c). State **one** advantage of using a graphical user interface. (01 mark)

* *GUIs is that they make computer operations easier to learn and use.*
* *GUIs generally provide users with immediate, visual feedback about the effect of each action.*
* *GUI allows multiple programs and /or instances to be displayed simultaneously.*
* *Users do not need to know any programming languages.*

1. (a). You are given the following address:**https://www.google.ug**
2. **Protocol used**. (01 mark)

* *https.*

1. **Host name**. (01 mark)

* *Google.*

(b). State **one** purpose of the following parts of the e-mail message:

(i). **BCC** (01 mark)

* *To hide identity of all e-mail recipients.*

(ii). **CC** (01 mark)

* *To open identity to all e-mail recipients.*

(iii). **Attachment.** (01 mark)

* *To add a separate document, file, message to be sent to the recipients along with the e-mail message.*

1. (a). State **one** way the Internet can support business activities. (02 marks)

* *Online buying and selling of goods and services (e-commerce).*
* *Tracking of goods bought.*
* *Supports online payments and transactions among business people.*
* *Find and book courier services for the transportation of goods.*
* *Businessmen obtain a wealth of information about a variety of goods and services.*
* *Acquire clearance after filing returns with revenue collection agencies.*
* *Communicate to works, supervisers, e.t.c. in business.*
* *Store lots of information on online servers.*

(b). Define the following data communication tools:

(i). **Wiki**. (02 marks)

* *A*wiki*is a Web site that allows users to add and update content on the site using their own Web browser.*

(ii). **Blog**. (02 marks)

* *A*blog*(shortening of “weblog”) is an online journal or informational website displaying information in the reverse chronological order, with latest posts appearing first.*
* *It is a platform where a writer or even a group of writers share their views on an individual subject.*

1. (a). Give **two** dangers of computer vandalism. (02 marks)

* *Leads to loss of data.*
* *Leads to damage of computer hardware.*
* *Leads to imprisonment of offenders.*
* *Business activities come to a standstill.*

(b). State **two** health complications a user is bound to suffer as a result of interacting

with a computer for long. (02 marks)

* *Wrist pain.*
* *Constant headaches.*
* *Sight defect.*

(c). Identify **one** way a computer may be used as a tool to committing a crime. (01 mark)

* [*Fraud*](https://en.wikipedia.org/wiki/Fraud)*and*[*identity theft*](https://en.wikipedia.org/wiki/Identity_theft)*.*
* [*Information warfare*](https://en.wikipedia.org/wiki/Information_warfare)*.*
* [*Phishing scams*](https://en.wikipedia.org/wiki/Phishing)*.*
* [*Spam*](https://en.wikipedia.org/wiki/E-mail_spam)*ming.*
* *Propagation of illegal obscene or offensive content, including harassment and threats.*

1. (a). Describe how you would sort data in a spreadsheet application. (02 marks)

* *Select a range of cells.*
* *On the main menu, select data.*
* *Click sort and change the order or sort preference.*

(b). Give **two** facilities that can be used to emphasize data in a word processor. (02 marks)

* *Bolding.*
* *Alignment.*
* *Drop capping.*
* *Striking through.*
* *Indentation.*
* *Use of superscripts and subscripts.*
* *Highlights.*
* *Font change (size, colour, name, style)*
* *Italicing text.*
* *Bullets and numbering.*
* *Adding boarders.*

(c). State **one** function of a field size in a database table. (01 mark)

* *To allow a given number of characters is a database file.*
* *To make the database a little portable (light in weight).*

1. (a). Give **two** practices of green computing. (02 marks)

* *Power down the CPU and all peripherals during extended periods of inactivity*
* *Use LCD monitors instead of CRT monitors.*
* *Use notebook computers rather than desktops whenever possible.*
* *Minimize the use of paper and properly recycle waste paper.*
* *Dispose of waste according to state and local regulations*
* *Employ alternative energy sources for computing work stations, server networks and data centers.*
* *Power-up and power- down energy intensive peripherals.*
* *computer virtualization, e.g. running two or more logical computer systems on one set of physical hardware.*
* *Resource allocation, directing data to data centers where electricity is less expensive.*

(b). State **two**applications of information technology in teaching and learning. (02 marks)

* *Computer based learning.*
* *Distance learning through computer-based training and Web-based training.*
* *Simulations of experiments or real-life situations that may be hazardous.*
* *Electronic library system for searching, borrowing, and returning books.*

(c). Write **one** cause of low computer literacy in Uganda. (01 mark)

* *High levels of un employment.*
* *Low levels of literacy.*
* *Poverty in some regions.*
* *Un even distribution of electricity.*
* *Taxes imposed on computer equipment discourage users.*

1. (a). Distinguish between **WWW** and the **Internet**. (02 marks)

*The* **World Wide Web (WWW)** *is a network of online content that is formatted in HTML and accessed via HTTP,*

**While***;*

**Internet** *is a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols.*

(b). State **two** advantages of using an e-mail for communication. (02 marks)

* **It's free(cheap to use***). Once you’re online, there is no further expense.*
* **Easy to reference.** *Sent and received messages and attachments can be stored safely, logically and reliably.  It's a lot easier to organize emails than paper.*
* *Enables fast communicating.*
* *Can be received from anywhere.*
* *Separate documents can be sent as attachments.*
* *Provides notification whether the mail is sent or not.*

(c). List any **one** item you would need to set – up Internet connectivity at home. (01 mark)

* *MODEM,*
* *Computer / device with a browser software.*

1. (a). State **one**function of a data bus during data processing routine. (01 mark)

* *It provides a pathway for data between processing components.*

(b). Explain the following terms as used in relation to output hardware devices.

(i). **Dots Per Inch**. (02 marks)

* *Dots per inch is a measure of spatial printing, video or image scanner dot density, in particular the number of individual dots that can be placed in a line within the span of 1 inch.*

(ii). **Resolution**. (02 marks)

* *The total number of dots that make up an image on a computer screen.*

1. (a). Write down one specialized person that performs the following tasks:
2. *Computer technicians.* (01 mark)
3. *Network administrator.* (01 mark)
4. *Computer programmer.* (01 mark)

(b). State **two** possible causes of computer viruses in a laboratory. (02 marks)

* *Downloading Programs downloadable files are the commonest source of malware such as freeware, worms, and other executable files.*
* *Use of Pirated or Cracked Software.*
* *Email Attachments.*
* *Internet.*
* *Booting Data from Unknown CDs.*
* *Bluetooth sharing of files.*
* *Use of unpatched Software.*

1. (a). Describe a **slide sorter**facility a used in a presentation program. (02 marks)

* *A facility the enables the user to view all the slides in a presentation in a miniature / thumb nail view.*

(b). List **three** examples of publications that can be created using a DTP program. (03 marks)

* *Magazines.*
* *Calendars.*
* *Posters.*
* *Banners.*
* *Certificates.*
* *Brochures.*
* *Branding materials like fliers, business cards, e.t.c.*

1. (a). Choose a term below to fill in the spaces following:

**Half duplex, full duplex, simplex channel, bandwidth, through-put.**

(i). **Through put**. (01 mark)

(ii). **Simplex channel**. (01 mark)

(iii). **Bandwidth**. (01 mark)

(b). State **two** characteristics of a Local Area Network (LAN). (02 marks)

* *Spans a small geographical space like a building.*
* *Normally UTP cables are used.*
* *Cheap to set up.*
* *Small bandwidth normally realized.*
* *Easy to manage.*
* *Allows connection to other LANs to form a bigger network.*

1. (a). What is a **peripheral device**? (02 marks)

* *A***peripheral device***is a component that connects to a computer system externally to add functionality.*

(b). State **two** reasons to suggest why flash disks are commonly used today. (02 marks)

* *They are portable.*
* *They are cheaper by unit megabyte.*
* *They carry a lot of data.*
* *They have a high access speed.*

(c). Give **one** practical use of a Light Emitting Diode on a computer’s system case. (01 mark)

* *To indicate status of a component e.g. available, ready, faulty, processing activity, e.t.c.*

1. (a). Give **two** reasons for re-installing computer software. (02 marks)

* *To recover from a hard drive failure.*
* *To change computer’s settings to the best personal needs.*
* *To make a computer stable after frequent restarts due to viruses.*

(b). Write down**one** use of the following:

(i). **Drivers**. (01 mark)

* *To enable hardware and software establish communication with a computer system.*

(ii). **Software update**. (01 mark)

* *To improve efficiency of a program by adding new functionalities.*

(iii). **Software upgrade**. (01 mark)

* *To own a new version of a software program that would suit current needs.*

1. (a). Write a check list of **two** utility programs that are used in file management. (02 marks)

* [*Archivers*](https://en.wikipedia.org/wiki/File_archiver) *utility.*
* [*Cryptographic*](https://en.wikipedia.org/wiki/Filesystem-level_encryption)*utilities.*
* [*Data compression*](https://en.wikipedia.org/wiki/Data_compression)*utility.*
* [*Data conversion*](https://en.wikipedia.org/wiki/Data_conversion)*utility.*
* [*Data recovery*](https://en.wikipedia.org/wiki/Data_recovery)*utility.*
* [*Data synchronization*](https://en.wikipedia.org/wiki/Data_synchronization)*utility.*
* [*Disk cleaners*](https://en.wikipedia.org/wiki/Disk_cleaner)*utility.*
* [*File comparison*](https://en.wikipedia.org/wiki/File_comparison)*utility.*
* [*File managers*](https://en.wikipedia.org/wiki/File_manager)*utility.*

(b). Identify an application program that can be used to carry out these tasks:

(i). Database program e.g. Ms. Access, e.t.c. (01 mark)

(ii). Presentation program. E.g. Ms. PowerPoint. (01 mark)

(iii). Desktop publishing program e.g. Adobe Indesign. (01 mark)

1. (a). State the **two** network model types. (02 marks)

* *Peer – to – peer network model.*
* *Client – to – server network model.*

(b). Give **three** advantages of using data communication in an organisation. (03 marks)

* *The messages can be stored on the device for a long period of time.*
* *Computer communication covers large distances through networks.*
* *It is relatively cheaper compared to paper based communication.*
* *It removes semantic barriers data can be easily channeled to different languages.*
* *It provides facilities such as video conferencing and VOIP which saves a lot of time and money.*
* *Computer communication is faster because people are able to send and receive data / information.*

1. (a). Distinguish between a **file** from a **folder**. (02 marks)

*A***file***is an object on a computer that stores data, information, settings, or commands used with computer program,*

**While***;*

*A* **folder** *is the virtual location for applications, documents, data or other sub-folders.*

(b). Study the following file path:

1. **File extension**. (01 mark)

* .*docx*.

1. **Root directory**. (01 mark)

* *E.*

(c). Give **one** example of symbols that are not allowed in a file name. (01 mark)

* /
* *\*
* *?*
* *%*
* *\**
* *:*
* *|*
* *"*
* *<*
* *>*
* *.*

**END**