

UTES Mock Examination 2017 Marking Guide

ICT

Paper 1

Marking guide

1. (a) Define the term information processing. **(01mark)**

Is a series of input, storage, processing and output activities involved in transforming data into information.

Or

Is a series of activities involved in transforming data into information.

- (b) Write down the stages involved in the information processing cycle. **(04marks)**

Input

Storage

Processing

output

2. (a) Distinguish between a surge protector and the UPS. **(02marks)**

A surge protector is a device that simply protects your computer (or any other appliance) from electrical surges, spikes, and other fluctuations in the voltage.

Where as

An uninterruptible power supply (UPS) is a device that allows a computer to keep running for at least a short time when the primary power source is lost.

- (b) Mention three ways of preventing dust accumulation in a computer laboratory, on computer systems and equipment. **(03marks)**

Cover computers with a piece of cloth after use.

Regularly blow dust out of the system unit.

Use a wool carpet to absorb some dust.

3. (a) Define an icon. (01mark)

Is a pictorial or graphical representation of a file or program.

- (b) Explain the major icons found on the computer desktop running windows operating system.

(04marks)

My computer

Recycle bin

My documents

My computer

4. (a) Define the term file delimiter. (01mark)

A file delimiter is a sequence of one or more characters used to specify the boundary between separate, independent regions in plain text or other data streams.

An example of a delimiter is the comma character

- (b) Give four examples of file extensions and the file types they represent. (04marks)

Audio file ----- mp3

Jpeg.....image

Word documentdoc

Ms excel.....xls

Text file.....txt

Etc

5. (a) What is an input device? (02marks)

Is a hardware component used to feed data into the computer memory.

- (b) Mention any two categories of input devices that you know. (02marks)

Text input device

Audio input device

Biometric device, etc

any two

- (c) Give one example of each category mention in question 5(b) above. (01mark)

Biometric device: hand geometry system

Text input device: keyboard

Audio input device: microphone

6. (a) State the function of each of the following parts in the computer.

(i) PCI slot

It is used to expand the capabilities of a computer

(01mark)

(ii) VGA port

VGA ports is used to transfer analog video signals from one machine to another.eg from system unit to monitor, from system unit to data projector.

(01mark)

(b) Explain the specifications below.

(i) 3GHZ Processor:

Computer has a processing speed of 3GHZ.

(02marks)

(ii) 3.00GB RAM:

Computer has memory capacity of 3.00GB.

(01mark)

7. (a) Distinguish between a utility programs from an operating system.

(02marks)

Utility: Is a system program that enhances the performance of an operating system.

Where as

Operating system: Is system software that manages computer hardware and software resources and provides common services for computer programs.

Both sides correct

(b) Give any three functions of a screen saver utility program.

(03marks)

Entertainment

It is used to prevent ghosting

It safe guard data files from un authorized access.

8. (a) Define the term computer Hardware.

(01mark)

Refers to the tangible/physical components of a computer system.

(b) Mention the components that make up the computer hardware.

(04marks)

Input

Output

Storage

Processing

9. The following checks are involved in the POST when the computer is booting. Indicate TRUE or FALSE against each statement in the table below. **(05marks)**

	Statement	TRUE/FALSE
(a)	RAM check	TRUE
(b)	Information check	FALSE
(c)	Keyboard check	TRUE
(d)	HDD controller	TRUE
(e)	Power check	FALSE

10. (a) Define the term Central processing Unit (CPU). **(02marks)**

Is the electronic circuitry within a computer that carries out the instructions of a computer program by performing the basic arithmetic, logical, control and input/output.

Or

Is the primary component of a computer that processes instructions.

- (b) Identify the components that make up the CPU. **(03marks)**

Control unit

Registers

Arithmetic and Logic Unit (ALU)

11. (a) Define the following terms as used in spreadsheets.

- (i) Value **(01mark)**

Refers to numeric entries in the spreadsheet table e.g. 45, 21

- (ii) Label **(01mark)**

Refers to text/alphanumeric entries in a spreadsheet table.

- (b) List any two spreadsheet application software. **(03marks)**

Ms excel

Lotus 1-2-3

Visi-calc

Smart sheet

Google sheets, etc

any two

- (c) Give any one arithmetic function found in electronic spreadsheets. **(01mark)**

Product

Sum

any one

Average

Mode, etc

12. (a) complete the table below.

(05marks)

Application software	purpose
Spreadsheet program	Enables a user to perform mathematical calculations
Web browser	Enables access and formatting of web pages for viewing
CAD	assists in creating engineering, architectural, and scientific designs
Project management software	it can manages estimation and planning, scheduling, cost control, budget management, and resource allocation.
Presentation program	Is used to create presentations that communicate ideas, messages, and other information to a group through a slide show.

13 (a).Computer installations are faced with a number of safety and security threats. As an informed ICT student;

State five examples of physical computer security threats.

(05marks)

Burglary and theft

Fire outbreak

Floods

Earth quark

Lightning and thunder, etc

14. (a) Give three benefits of communicating using video conferencing over traditional calls using a phone.

(03marks)

Reduces decision making time

Better understanding of the conversation

any three

Increased face to face interaction.

Aids telecommuting

(b) Apart from video conferencing, give any two services provided on internet. **(02marks)**

Internet telephony

Instant messaging

any two

Email

Chart room.

Mailings, etc

15. (a) Identify any two physical transmission media. (02marks)

Coaxial cables

Fibre optic

any two

Twisted pair cable, etc

- (b) Give three limitations of physical transmission media. (03marks)

It is heavy and bulky.

Needs a booster over longer distances.

Data suffer from noise during transmission,etc

16. Use the terms below to complete the statements that follow. (05marks)

Web master

ICT trainer

software developer

Data base administrator

Graphic designer

Computer technician

Network system administrator

- (a) A professional who designs and creates either graphics or 3D animations for software programs, games, movies, WebPages is a graphic designer.

- (b) A professional responsible for assembling, testing and repairing of electronic equipments is Computer technician

- (c) A professional responsible for designing, setting up, maintaining, monitoring use of network resources and troubleshooting network related problems is Network system administrator

- (d) A professional responsible for creating, maintaining or designing WebPages. And responsible for monitoring the access and use of internet connection by enforcing the security measures is Web master

- (e) A professional responsible for training people on how to use ICTs and various programs Is ICT trainer

17. (a) Distinguish between Peer to peer and client server networks. (02marks)

Peer to peer network allows any user on a network to share file and resources with any other user and does not require a central dedicated server.

Where as

Client server networks files are stored on a centralized, high speed file server PC that is made available to client PCs.

(b) Platinum Business Centre is interested in building a state of art modern electronic office in Kampala. You have been approached to explain the various benefits with electronic networking. Using your knowledge of information technology, explain three advantages that Platinum Business Centre would derive from adopting an electronically networked business. (03marks)

Enables resource sharing like printers, modems, storage media, application programs etc.

Enables remote communication between devices e.g. people can communicate efficiently via E-mail, instant messaging etc.

Enables cost effectiveness and reliability to the business

Enables distributed processing **any three**

18. (a) Explain what is meant by clouding computing. (02marks)

Is a term referring to the delivery of hosted services over the internet

Or

A model for delivering information technology services in which resources are retrieved from the internet through web-based tools and applications, rather than a direct connection to a server.

(b) Outline any three benefits of cloud computing. (03marks)

Ease of access of files or images as a cloud can be accessed from any location.

More memory can be devoted to computing tasks as opposed to storage.

Using cloud storage, data can be protected from problems or damage to local machines.

19. (a) Suggest any two healthy risks associated with the continued usage of computers. (02marks)

Back pain

Neck pain

any two

Eye strain

Headache

Repetitive strain injury (RSI)

(b) Outline the steps taken to start a program on a computer running a windows operating system.

(03marks)

Click the start button on the desktop

Select all programs from the start menu

Click on the program of your choice from the program menu

Or

Double click on the short cut of the program on the desktop

20. Use the table below to answer the following questions:

ID	NAME	DATE OF BIRTH	PROFESSION	ALLOWANCE (per day)	DAY S
200701	Mukiibi	1/16/1970	Teacher	120,000	3
200702	Kalenge	2/17/1978	Doctor	170,000	2
200703	Lubandi	3/20/1979	Mechanic	100,000	1
200704	Nangaka	12/01/1977	Nurse	100,000	3
200705	Obonyo	05/05/1980	Mechanic	100,000	1
200706	Nakitenda	2/17/1972	Nurse	100,000	2
200707	Mulamuzi	07/03/1973	Mechanic	100,000	3

(a) Which field can allow a foreign key?

(01mark)

ID

(b) State the possible field size for the field containing Day.

(01mark)

1 or 2 or 3....

(c) Write down the criteria to return date of birth between 15/01/1977 and 10/09/1980.

(02marks)

Between #15/01/1977# and #10/09/1980#

(d) Mention one data type that can accommodate the entry in ID entry.

(01marks)

Number

END