

School: _____ **Signature** _____

2½ hours



Uganda Advanced Certificate of Education

Paper 1

2 hours 30 minutes

- The paper is made up of 20 equally weighted questions.
- Answer all questions in this paper.
- All answers should be written in dark blue or black ink in the spaces provided on the question paper.
- No additional answer sheets should be inserted.

[illegible]

1. (a) Define Data transmission. (2 marks)

- (b) In relation to data transmission, identify the following data transmission modes. (3 marks)

(i)

A

 $\longrightarrow$

B

(ii)

A

 $\longleftrightarrow$

B

(iii)

A

 $\rightleftarrows$

B

2. (a) Describe how a non-impact printer works. (2 marks)

- (b) Mention three ways how one can take care of a printer. (3 marks)

3. Use the URL below to answer questions that follow. (5 marks)

http://www.wakissha.ug/news/sports/top_story.html

State the;

(i) Protocol _____

(ii) Domain name _____

(iii) Top-level domain _____

(iv) Name of web page _____

(v) File extension _____

4. Study the sample advert below and explain the specifications in details. (5 marks)

HP Probook Pc Sale!
Intel Duo, 2.4 GHz, 4 GB RAM
500GB HDD, Tru brite TFT
DVD - writer at only 1,700,000/=

(i) HP Probook PC

(ii) 2.4 GHz

(iii) 4 GB-RAM

(iv) 500GB HDD

(v) Intel Duo

5. Computer users complained of frequent headaches and fatigue after using computers in a computer room.

(a) State three reasons that could cause the above conditions. (3 marks)

(b) Give two solutions to the conditions mentioned above. (2 marks)

6. (a) Distinguish between a blog and web portal. (2 marks)

- (b) Outline three steps of downloading and printing information from internet available in PDF format. (3 marks)

7. The data below shows the table structure of silver shine distributor Ltd Database. Use it to answer questions that follow.

Field	Data type	Size
DVD-code	Alpha numeric	8
Title	Text	20
Purchase price	_____	Fixed
Sale price	Currency	Fixed
Quantity	_____	3
Date bought	_____	Medium

- (a) Determine the primary key used in the above information. (2 marks)

- (b) Fill in the missing data types of the above fields. (3 marks)

8. Private, cyber patrol, contingency plan, spyware, cracker, surge protection. From the above list, select the most appropriate option to fill the blanks in the following statements. (5 marks)

- (i) _____ would safeguard computer hardware and software from human and natural disasters.
- (ii) To restrict children from accessing offensive sites on the network _____ program can be used.
- (iii) Data that is exclusively owned and must not be revealed to a third party is said to be _____
- (iv) Device used to protect a computer from excess electric power that may destroy computer components is called _____
- (v) Person who gains unauthorized access to a computer system for malicious

9. Explain five effects of computer and other ICT devices on physical and mental health. (5 marks)

10. (a) Using the following file path.
D:\STUDENT WORK\EOT PRACTICAL\Safety.Doc
(i) State the name of the immediate sub-folder in which a student can save work. (1 mark)

- (ii) The root directory on to which a file must be saved. (1 mark)

- (b) List down three types of files. (3 marks)

11. By the help of arrows, show the suitable function of each of the devices below; (5 marks)

DEVICES

FUNCTIONS

- | | |
|----------------------|---|
| (a) Web cam | Storing large volumes of data. |
| (b) Bar code reader | Inputting data into the computer. |
| (c) Magnetic tape | Pointing on images on the screen. |
| (d) Joy stick | Connecting devices that are close to one another. |
| (e) Bluetooth device | Storing web pages. |
| | Capturing images that are stored on the web. |

12. The worksheet below shows results of senior six students in End of Term I exams. Use it to answer the questions.

	A	B	C	D
1.	Name	Art	Bio	Chem
2.	Sali	82	60	45
3.	Tim	49	48	60
4.	John	56	50	57
5.	Arthur	40	52	62

Write down a function formula to compute;

- (i) Total mark for John. (1 mark)

- (ii) Highest mark scored in Art. (1 mark)

- (iii) If the total mark for Bio was increased by 10%, find the new total mark. (3 marks)

13. (a) Define the term register. (2 marks)

- (b) List down three types of registers. (3 marks)

14. Nakanwagi is an S.6 vacist, while she is still waiting for her results back from UNEB, she decided to start a Home based – business where she makes cookies and crisps, packs them and supplies them to nearby supermarkets and peddler who move around the trading centre selling the products. Nakanwagi's mother lives in U.K and has promised to send her a powerful laptop and a small printer to boost her business.

- (a) As a student of ICT explain two ways through which the laptop and printer will improve Nakanwagi's already existing business. (2 marks)

- (b) Suggest three services directly offered by the laptop and the printer which Nakanwagi can sell and earn additional income. (3 marks)

15. (a) Write the following in full. (2 marks)

(i) GSM

(ii) GPRS

(b) List three examples of search engines (3 marks)

16. (a) Distinguish between a physical drive and a logical drive. (2 marks)

(b) Explain why it is not advisable to compress a storage media. (2 marks)

(a) Give one reason why it is important to back up your data regularly. (1 mark)

17. Read the statements below and write TRUE or FALSE. (5 marks)

STATEMENT		TRUE / FALSE
(a)	Fire wall is both hardware and software.	
(b)	Tele conferencing is real-time communication.	
(c)	Paradox is an application package.	
(d)	A student delivering a presentation would need an LCD projector and laptop.	
(e)	Buffers are part of ALU as registers are part of control unit.	

18. (a) What is the difference between computer servicing and computer repair? (2 marks)

- (b) Mention any three requirements needed for computer servicing and maintenance . (3 marks)

19. Mr. Okada, a lab technician wanted to install windows operating system on a new computer that came without O.S. He inserted the operating System CD but every time he switched on the computer, it displayed an error message. (3 marks)

(b) Suggest three causes of the problem.

(c) Highlight two possible causes of corrupted registry. (2 marks)

20. After seeing the dangers that information systems are faced with, due to threats to data and information and perpetration of computer crimes. It is important to look at some measure that can be taken to detect and prevent computer crimes.

(a) Distinguish between Audit trail and log files. (2 marks)

(b) Explain how the following computer crimes are committed. (3 marks)

(i) Fraud.

(ii) Sabotage.

(iii) Alteration.

END