

840/1
INFORMATION AND
COMMUNICATIONS
TECHNOLOGY (ICT)

Paper 1

July/August 2024

2¹/₄ hours



WENSSEC

Regional Mock Examination

Uganda Certificate of Education

INFORMATION AND COMMUNICATIONS TECHNOLOGY
(ICT)

Paper 1

Theory

2 hour 15 minutes

Instructions to Candidates

This paper consists of two sections A and B. It has seven Items

Section A has one compulsory item

Section B has two parts I and II. Answer **two** items from each part

*Answer **four** examination items in all.*

*Any additional item(s) answered will **not** be marked.*

*All answers **must** be written in the answer booklet(s) provided.*

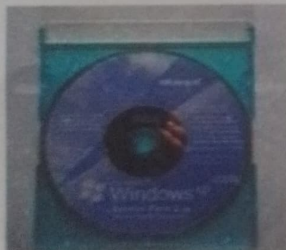
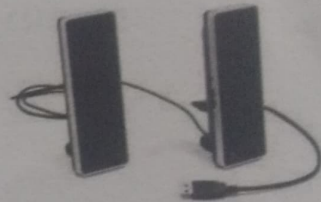
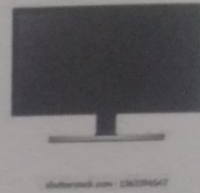
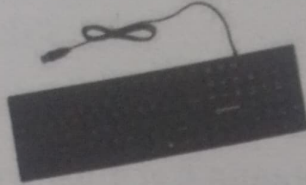
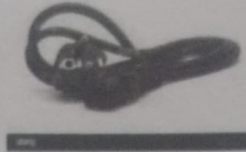
(WENSSEC 2024)

SECTION A

Answer the item in this section.

Item 1.

Mary applied for a job to teach ICT in Aga Khan Academy during her holidays. During the interview they were taken to the computer laboratory and the following ICT equipment were placed in the room.



Given knowledge on ICT learnt from school as a student of ICT;

Task

- Outline the step-by-step process you would follow to ensure a successful assembly, from preparing the workspace to installing the operating system. **(16 Scores)**
- Highlight key considerations on how one can maintain the ICT tools in good working condition. **(09 Scores)**

SECTION B

*This section has **two** Parts; I and II.*

PART I

*Answer **two** items from this part.*

Item 2

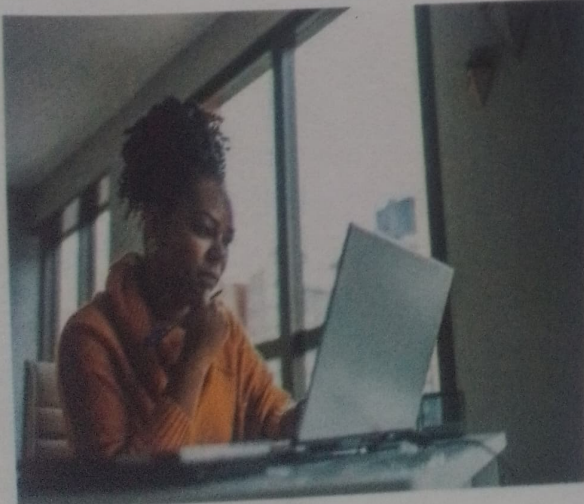
The Ministry of Education and Sports has selected you to prepare a presentation for a technology conference where you will explain the classification of computer hardware based on its functions.

Task

Describe the main categories of hardware components. Provide examples of each category and explain their roles in the overall functioning of a computer system. **(25 Scores)**

Item 3

With the introduction of internet and its services like social media platforms and other instant messaging boards, majority people tend to spend a lot of time online doing research and chatting with friends giving less time for other activities as evidenced in images 1 and 2 below.



You have been selected as a health educator to address a group of students in your school community about the potential effects of continuous use of ICTs such as smartphones and computers among others.

Task

- (a) Discuss the physical, psychological, and social consequences that individuals may experience from prolonged ICTs and constant connectivity. **(15 Scores)**
- (b) What solutions would you give to maintain a healthy balance and how such effects can be avoided? **(10 Scores)**

Item 4

Imagine you are a cybersecurity trainer tasked with conducting a workshop for a group of elderly citizens who are new to using computers and the internet.

Task.

Outline the top five safety precautions they should observe while using ICT tools such as email, online banking, and social media to protect themselves from potential risks and threats. **(25 Scores)**

PART II

Answer two items from this part.

Item 5

You have been hired by a medium-sized technology company that specializes in developing software for healthcare providers. The company recently experienced a data breach where patient records were compromised. They are concerned about future incidents and want your expertise to strengthen their security measures.

Task.

- (a) Identify the security threats that can affect computer systems (hardware and software), private or confidential data. (15 Scores)
- (b) Develop a comprehensive approach for securing computer systems (hardware and software) against similar attacks in future. (10 Scores)

Item 6

A local electronics retailer has been improperly disposing electronic waste (e-waste) by simply dumping old computers, monitors, and other devices in a nearby landfill as seen in images 1 and 2.



This careless disposal method has raised concerns among environmental activists and the community about potential hazards such as toxic chemicals leaching into the soil and groundwater.

Task

As an environmental consultant, outline the risks associated with improper e-waste disposal and recommend sustainable practices that the retailer should adopt to responsibly manage and recycle e-waste while complying with environmental regulations.

(25 Scores)

Item 7

A senior six student during her vacation wishes to apply for an online degree program in computer science but has limited knowledge in using ICTs, her father has requested her to go ahead and apply after submission she should provide a copy of her application for follow-up.

Task

If she approaches you to guide her through the procedure, Highlight specific features and online resources you would use to successfully submit her application. **(25 Scores)**

END