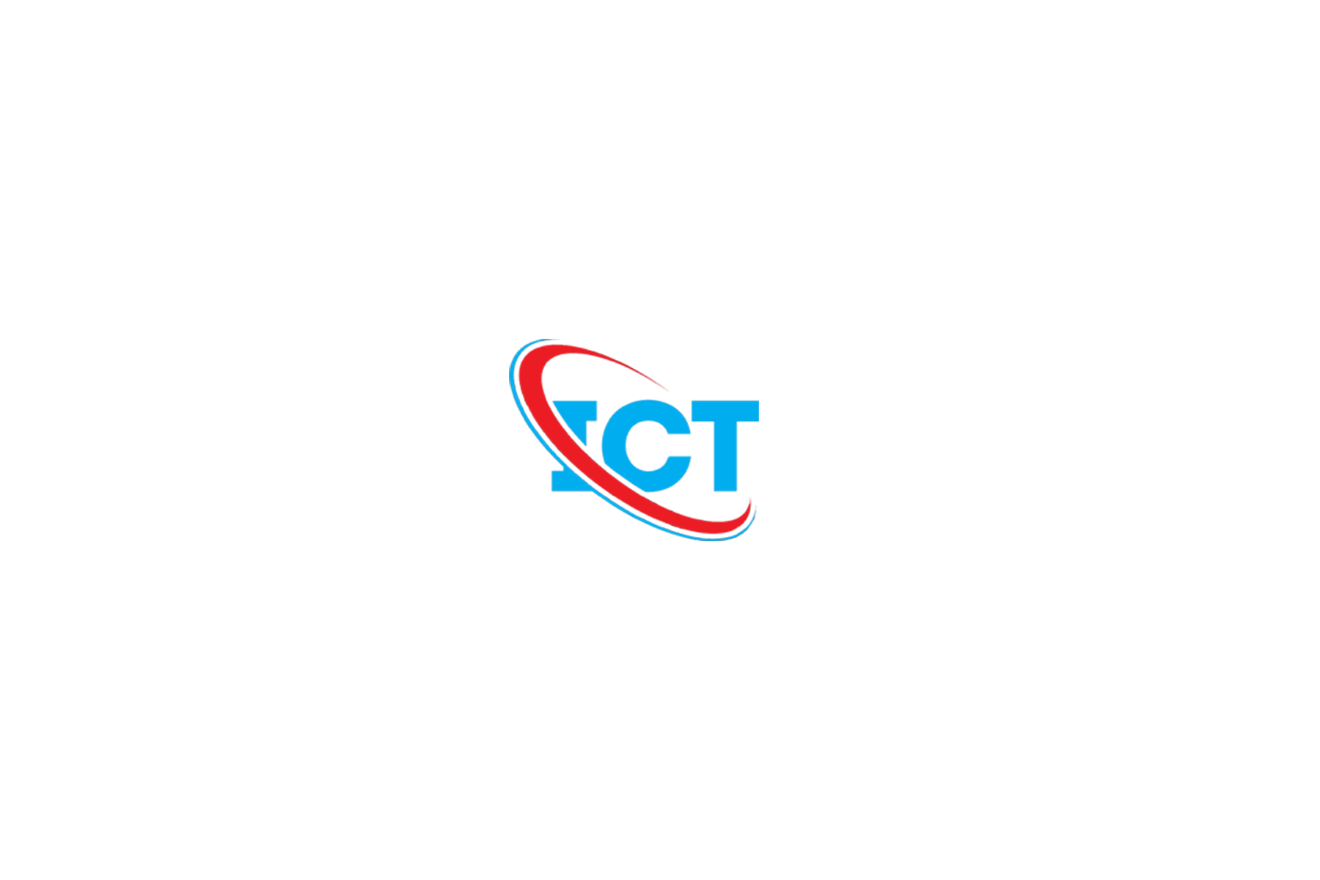
**Student’s Name:** …………………………………………………

**Signature** ……………………………………

**S850/1   
SUBSIDIARY ICT  
 Paper 1**

**(Theory)  
 November 2025**  
 21/2 hours

**KABS ICT RESOURCE CENTER**

**Uganda Advanced Certificate Of Education**

SUBSIDIARY INFORMATION AND COMMUNICATION TECHNOLOGY

**Paper 1**

**(Theory)**

2 hours 30 minutes

**INSTRUCTIONS TO CANDIDATES:**

*This paper consists of* ***twenty*** *questions.*

*Answer* ***all*** *questions in this paper*

*All answers should be written in* ***blue*** *or* ***black*** *ink in the spaces provided.*

|  |  |  |
| --- | --- | --- |
| **Questions** | **For Examiner’s Use Only** | |
| **Marks** | **Initials** |
| **1-2** |  |  |
| **3-4** |  |  |
| **5-6** |  |  |
| **7-8** |  |  |
| **9-10** |  |  |
| **11-12** |  |  |
| **13-14** |  |  |
| **15-16** |  |  |
| **17-18** |  |  |
| **19-20** |  |  |

**Turn Over**

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1. (a) Explain the term ***digital data***. *(01 Mark)*

(b) Differentiate between ***structured data*** and ***unstructured data*** *(02 Marks)*

(c) Give an ***example*** of each of the above. *(02 Marks)*

2. (a) Identify ***two*** safety precautions when setting up a computer laboratory. *(02 Marks)*

(b) State ***three*** ways to protect computer equipment from power surges. *(03 Marks)*

3. (a) Define a ***utility program*** and give ***one*** example. *(02 Marks)*

***Example*** *(01 Mark)*

(b) Explain the ***importance*** of the following system software:

* (i) Antivirus software *(01 Mark)*
* (ii) Backup tools *(01 Mark)*

4. (a) List any ***three*** types of computer ports commonly found on a motherboard. *(03 Marks)*

(b) Describe the function of the following hardware components:

* (i) Network Interface Card (**NIC**) *(01 Mark)*
* (ii) Power Supply Unit (**PSU**) *(01 Mark)*

5. (a) What is meant by "***Primary Memory***"? *(01 Mark)*

(b) Compare **secondary storage** devices and **offline storage** devices, providing **one** example of each. *(02 marks)*

***Example*** *(02 Marks)*

6. (a) Outline ***two*** roles of an Internet Service Provider (ISP). *(02 Marks)*

(b) List ***three*** advantages of using ***fiber-optic*** internet connections over ***DSL***. *(03 Marks)*

7. (a) Explain the concept of Virtual Private Network (**VPN**). *(02 Marks)*

(b) Identify ***two*** scenarios where a VPN would be useful. *(02 Marks)*

(c) Give one example of VPN. *(01 Mark)*

8. (a) Differentiate between ***data communication*** and ***networking***. *(02 Marks)*

(b) List ***three*** benefits of computer networks. *(03 Marks)*

9. (a) What is ***encryption***? *(02 Marks)*

(b) Outline ***three*** reasons why encryption is important in computer networks. *(03 Marks)*

10. (a) Define ***emerging technologies*** in the context of ICT. *(02 Marks)*

(b) Provide ***three*** examples of emerging technologies in business. *(03 Marks)*

**11. The table below shows a summary of computer storage usage:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Storage Type** | **Capacity (GB)** | **Used Space (GB)** | **Free Space (GB)** |
| SSD | 500 | 300 | 200 |
| HDD | 1000 | 750 | 250 |

(a) Calculate the total storage capacity of the system in ***GB***. *(02 Marks)*

(b) Calculate the percentage of free space available on the HDD. *(02 Marks)*

(c) Suggest ***one*** way to optimize storage space usage. *(01 Mark)*

12. (a) Give ***two*** advantages and ***one*** disadvantage of using cloud storage.

**Advantages** *(02 Marks)*

**Disadvantage** *(01 Mark)*

(b) Name ***two*** types of flash storage devices. *(02 Marks)*

13. (a) Explain the term ***proprietary software***. *(01 Mark)*

(b) Suggest **two** reasons why businesses may prefer proprietary software over open-source software. *(02 Marks)*

(c) List two examples of situations where shareware is more suitable than freeware. *(02 Marks)*

14. (a) Define the term ***packet switching***. *(01 Mark)*

(b) Explain ***two*** roles of a router in data communication. *(02 Marks)*

(c) Identify ***one*** limitation of wireless communication networks. *(02 Marks)*

15. (a) Suggest ***three*** roles of ICT in the health sector. *(03 Marks)*

(b) Outline ***two*** ethical concerns related to the use of ICT in healthcare. *(02 Marks)*

16. (a) Match the following terms to their correct uses: *(03 Marks)*

|  |  |
| --- | --- |
| **Term** | **Use** |
| Trojan | Malware disguised as legitimate software. |
| Firewall | Prevents unauthorized access to or from a network. |
| Bluetooth | Enables short-range wireless data transmission. |

(b) State the difference between a ***data*** bus and an ***address*** bus. *(02 Marks)*

17. (a) List ***three*** examples of output devices used in communication. *(03 Marks)*

(b) Give ***two*** examples of hardware that supports parallel processing. *(02 Marks)*

18. (a) What is a ***URL*** (Uniform Resource Locator)? *(01 Mark)*

(b) Identify ***two*** components of a URL. *(02 Marks)*

(c) State ***two*** uses of URLs. *(02 Marks)*

19. (a) Explain the term "***disk partitioning***" in computer storage. *(01 Mark)*

(b) Outline ***three*** benefits of using external hard drives for backups. *(03 Marks)*

(c) Suggest ***one*** software used for creating bootable drives. *(01 Mark)*

20. (a) List ***three*** advantages of using animation in presentations. *(03 Marks)*

(b) Suggest ***two*** documents that can be produced using spreadsheet software. *(02 Marks)*

**END**

Contact **0775610762** For a Marking Guide at **5000**/=