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| **840/1**  **INFORMATION AND**  **COMMUNICATIONS**  **TECHNOLOGY(ICT)**  **Paper 1**  **2024** |  |

**UGANDA TEACEHRS EDUCATION CONSULT**

**Uganda Certificate of Education**

**INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)**

**Paper 1** Theory

***SCORING GUIDE***

**ITEM I**

1. **Competency (Basis of assessment)**

**Produces a focused introduction *(01 score)***

**The candidate is expected to:-**

Defines what a Computer Laboratory

Briefly explain what a user policy is

**Introduction Expected:**

A Computer laboratory is a room that has been specially prepared to facilitate installation of computers, and provide a safe conducive environment for teaching & learning of Computer Studies.

On the other hand

End user policies or Lab rules and regulations refers to the rules for the computer laboratory which prohibit using the facilities for illegal activities or unauthorized access.

The following considerations should be observed when setting up the computer laboratory.

**(Any 04=4scores)**

* Security of the computers, programs and other resources.
* Reliability of the source of power.
* Number of computers to be installed,
* The amount floor space available.
* The maximum number of users that the laboratory can accommodate.

**On the other Hand,** End user policies or Lab rules and regulations may include the following

**(Any 04=4scores)**

*NB. Candidates who use* ***MUST*** *should be discredited*

* Each person may only use one computer at a time.
* Computers and peripherals are not to be moved or reconfigured without approval of Lab and Classrooms staff.
* Students may not install software on lab computers. If you have a question regarding specific software that you need to use, contact the Classroom and Labs support team.
* Food is generally not allowed in computer labs
* Behavior and activities that disturb other users or disrupt the operations of the lab are not allowed. This includes, but is not limited to: physical activities such as "rough-housing," loud music, etc.
* Remember to log out whenever you are done using any lab computer. The school cannot be held responsible for the protection of your data or account when you leave a computer logged in with your account.
* Violation of any of the above rules may result in disciplinary action and the loss of lab privileges.

1. Information Communication Technology(ICT) tools are digital infrastructures such as; computers, laptops, desktops, data projector, software programs, printer’s scanners and Interactive teaching box that help capture, store, process or manipulate data into information. From the context above, The above ICT tools where supplied because of the following reasons. >>

NB. Candidates should link their responses to the scenario as stated in the example of CCTV and the dust blower ***(14 scores )***

**1x 7 scores for mentioning each ICT tool provided in the support material**

**1x7 Scores for stating the application/Use each ICT tool provided in the support material**

* CCTV Camera

Used to monitor and record the activity of a building, as well as its surroundings. These systems will help to primarily combat crime such as theft or vandalism.

* Dust Blower

It shall be used to blow away dust, cut materials, waste, debris and alike, away from the working area.

* Uninterruptible Power supply
* Power stabilizer
* Computer Set with peripherals such as Mouse, Keyboard, LCD monitor, Speakers,
* Fire extinguisher
* MFP- Multifunctional peripheral

Conclusion ***(01 score)***

Basing on the above write up/Presentation, to setup a computer laboratory, the factors outlined above should be taken care of by the School more especially the security of the computers. On the other hand, the End user policies should be adhered to by the students, staff and any other external party who would be using the computers to help protect the computers and other ICT related devices in the computer laboratory from misuse and destruction.

Finally, the need/reasons for supply of the additional ICT tools has been justified in the second phase of the item as stated above.

**Format of presentation.**  ***(01 score)***

***Total scores for Section A: 25 SCORES***

**SECTION B**

**PART 1**

**ITEM** **2.**

**Competency (Basis of assessment)**

**Produces a focused introduction *(01 score)***

**The candidate is expected to:-**

* Talk about Information/ data transfer and accessibility
* Briefly candidates may summarize the necessary hardware that may be needed to transfer the photos from the Digital camera to the desktop computer running windows operating system.

**Examiners should Note:**

**Candidates may write their responses basing/opinions but we shall score only one side and refer to the other as OUS – Out of scope.**

• Using a USB Cable (on Windows based operating system)

• Using an SD Card (on Windows based operating system)

**Method1**

***(SCORE 1x 8 =08 SCORES for each correct steps)***

**Using a USB Cable (on a computer running Windows)**

1. Turn on your computer. This method will work on Windows 11, 10, 8, or earlier.
2. Connect the camera to your computer. Use the USB cable that came with your camera to connect it to an open USB port your computer.
3. Turn on your camera. Your computer should recognize it immediately.
4. Click the "AutoPlay" box.
5. Select Open folder to view files. This will open the File Explorer. You may need to scroll down to find this option.
6. Click DCIM. You may see the photos immediately after clicking your device. In most cases, photos will be in a folder labeled DCIM (Digital Camera Images).
7. Select the photos you want to transfer. You can transfer individual photos, or press CTRL + A to select all the photos in the folder.
8. Drag the pictures to a new location. You can drag the photos into the Pictures folder, or you can create a new folder.
9. Eject the camera. Click the arrow in the bottom-right corner of the task bar. Click the device icon, and then click Eject. You can now safely unplug the camera from the computer.

**METHOD 2**

**Using an SD Card (on Windows based operating system)**

1. Remove the SD card from your camera. Open the panel that contains the internal storage, then press the SD card to unlock it from your camera.
2. Insert the SD card into your computer's card reader. If your computer doesn't have a card reader, you can purchase an external SD card reader that connects via USB.
3. Open the File Explorer. Right-click the Start menu and click File Explorer.
4. Click your SD card. You can find this in the left panel. If you don't see it, click the arrow on the left of This PC to expand the options. If you don't see the photos immediately, double-click the DCIM folder.
5. Select the pictures you want to transfer. You can transfer individual photos, or press CTRL + A to select all the photos in the folder.
6. To select multiple photos, hold CTRL and click each photo.
7. Drag the pictures to a new location. You can drag the photos into the Pictures folder, or you can create a new folder.
8. The amount of time it takes to transfer will depend on the amount of files and your computer. If you want to delete the photos from your camera's SD card, wait for the files to finish transferring to your computer. Return to the SD card's folder and press CTRL + A to select all the photos. Right-click the photos, then click Delete.
9. Eject the SD card. Click the arrow in the bottom-right corner of the task bar. Click the flash drive icon, and then click Eject. You can insert the SD card back into the camera

1. (i) Steps taken to upload a video to YouTube

***(SCORE 1x 8 =08 SCORES for each correct steps)***

1. Log in to your YouTube account.
2. Open the YouTube homepage and Sign In using your YouTube, Google or any other login Details
3. Click the "Create a Video or Post" icon. This is also located on the top right-hand corner of the page
4. Click the upload button that's located on the top of the homepage to the right of the search bar.
5. Choose the video you want to upload.
6. Go to "Select Files To Upload" to open the browser, then find the file you want to add. Alternatively, you could drag and drop your video into the browser window.
7. Before uploading your file, you will need to choose your privacy.

* Public: Your video content is available for anyone to see. It also appears in the search results and recommendations across YouTube.
* Unlisted: Your uploaded video is on YouTube, but only those with the video URL (sharing link) can view it.
* Private: Your video is on YouTube, but only you can see it when logged into your YouTube account.
* Scheduled: Use this setting to upload a video as private, scheduling it to go public at your chosen time.
* Select privacy settings when you upload a YouTube video

1. Now click on the open button, Next and lastly click on SAVE.

**On the other hand the steps taken for sending the photos as attachment to the mail address provided include the following.**

***(SCORE 1x 7 =07 SCORES for each correct steps)***

1. Log on to the Gmail website.
2. Gmail Compose button, an email compose box will pop up on screen.
3. Fill in the Recipient and Subject fields as you normally would.
4. Click the Attach files icon next to the Send button.
5. A file browser window will open. Locate the image you wish to attach to the email and click it.
6. To select multiple images, hold the Ctrl key down as you click chosen images. Click Open.
7. Your image will now be attached to your email. You can now click Send to send it or click the Attach files icon again to add more files.
8. Click Send to send your email with the picture attached.
9. You will be shown a confirmation message when the email has been sent correctly.

By following these steps, the video and photos can successfully be uploaded on YOUTUBE and sent to the email address provided. ***(01 score for the conclusion)***

**NB. Candidates may not necessary make a write of the steps in order, follow through the entire essay / write up before you make an informed decision on scoring.**

**ITEM** **3.**

1. **Competency (Basis of assessment)**

**Produces a focused introduction *(01 score)***

**The candidate is expected to:-**

Briefly explain what computer specifications is

**Introduction Expected:**

PC specifications refer to the detailed technical information about a personal computer, including its hardware components, operating system, and other relevant details. These specifications determine the capabilities and performance of a PC

Below are some of the ways we can check for PC specifications (***09 scores= Any 3x3)***

**METHOD 1**

**USING COMMAND PROMPT**

**Click the Start menu.** This is the Windows logo.

Select Start

Type CMD in the windows search ICON

TYPE systeminfo at the prompt

PC specification will be displayed

METHOD 2

Click start

Type About your PC and press enter

The information will be displayed about the computer

METHOD 3

Click Start

Type THIS PC

Select computer

Click on system properties

The PC information will be displayed

METHOD 4

Select Start

Type DXDIAG in the search box

Select okay

The information will be displayed about your computer

(B) INTRODUCTION ***(01 score)***

Management shall be best advised that generally the issues affecting the Old desktop computer is as a result of poor maintained and servicing practices

Candidates are expected to come up with the following write ups as solution to mitigate the above concerns;

***(Any 4 x2= 8 marks)***

1. Adding another RAM SLOT with same capacity or replacing the RAM with a higher capacity RAM of 4 GB of the same fitting.
2. Upgrade of the processor for as long as it Is compatible to the motherboard
3. Upgrading of the operating system/ Installing a new up to date operating system
4. Installing updated Anti-virus software for example Kaspersky Anti-Virus, Norton Anti-virus.
5. Deleting Files/ programs that occupy un necessary space to allow increase of storage/Virtual memory
6. Document backup

NB. Candidates should align their solutions to scenario and specially tell what problems are being addressed

A conclusion is expected pointing out key facts that should be followed when addressing the above scenario in both sections. ***(01 scores)***

PART 2

**ITEM 4**

**Competency (Basis of assessment)**

**Produces a focused introduction *(01 score)***

**The candidate is expected to:-**

Write a focused introduction**, about what Word processing is all about.**

**Outlines the meaning of Mail merge**

Mail Merge is a useful tool that allows you to produce multiple letters, labels, envelopes, name tags, and more using information stored in a list or a database or a Spreadsheet.

Below are the steps involved in completing Mail merge

MAIL MERGE STEPS

PRACTICAL STEPS TRANSITED IN THEORY

1. Open an **existing** Word document or create a **new** one.
2. From the **Mailings** tab, click the **Start Mail Merge** command and select **Step-by-Step Mail Merge Wizard** from the drop-down menu.

The Mail Merge pane will appear and guide you through the **six main steps** to complete a merge. The following example demonstrates how to create a form letter and merge the letter with a **recipient list**.

Step 1:

* From the Mail Merge task pane on the right side of the Word window, choose the **type** of document you want to create. In our example, we'll select **Letters**. Then click **next: Starting document** to move to Step 2.

Step 2

* Select **Use the current document**, then click **Next: Select recipients** to move to Step 3

Step 3:

Now you'll need an address list so Word can automatically place each address into the document. The list can be in an existing file, such as an **Excel workbook**, or you can **type a new address list** from within the Mail Merge Wizard.

1. Select **Use an existing list**, then click **Browse**to select the file.
2. Locate your file, then click **Open**.
3. If the address list is in an Excel workbook, select the **worksheet** that contains the list, then click **OK**.
4. In the **Mail Merge Recipients** dialog box, you can **check** or **uncheck** each box to control which recipients are included in the merge. By default, all recipients should be selected. When you're done, click **OK**.
5. Click **Next: Write your letter** to move to Step 4.

If you don't have an existing address list, you can click the **Type a new list** button and click **Create**, then type your address list manually.

Step 4:

Now you're ready to write your letter. When it's printed, each copy of the letter will basically be the same; only the **recipient data** (such as the **name** and **address**) will be different. You'll need to add **placeholders** for the recipient data so Mail Merge knows exactly where to add the data.

To insert recipient data:

1. Place the insertion point in the document where you want the information to appear.
2. Choose one of the **placeholder** options. In our example, we'll select **Address block**.
3. Depending on your selection, a dialog box may appear with various customization options. Select the desired options, then click **OK**.
4. A placeholder will appear in your document (for example, **«AddressBlock»**).
5. Add any other placeholders you want. In our example, we'll add a **Greeting line**placeholder just above the body of the letter.
6. When you're done, click **Next: Preview your letters** to move to Step 5.

For some letters, you'll only need to add an **Address block** and **Greeting line**. But you can also add more placeholders (such as recipients' names or addresses) in the body of the letter to personalize it even further.

Step 5:

1. Preview the letters to make sure the information from the recipient list appears correctly in the letter. You can use the left and right scroll arrows to view each version of the document.
2. If everything looks correct, click **next: Complete the merge** to move to Step 6.

Step 6:

1. Click **Print** to print the letters.
2. A dialog box will appear. Decide if you want to print **All**of the letters, the current document (record), or only a select group, then click **OK**. In our example, we'll print all of the letters.
3. The **Print** dialog box will appear. Adjust the print settings if needed, then click **OK**. The letters will be printed.

**NB. Candidates are expected to come up with at least a chronological flow of the steps listed above.**

**Any 5 correct steps gives us 10 scores**

**ITEM 5**

**Competency (Basis of assessment)**

**Produces a focused introduction *(01 score)***

**The candidate is expected to:-**

Write a focused introduction**, about what an online meeting means and points out the necessary ICT tools both software and Hardware tools needed to conduct a successful online meeting**

This family gathering that involves people in different locations is referred to as an online meeting.

To successfully organize an online meeting, especially one that involves participants from different locations, you'll need several ICT tools that may include the following. Video conferencing software (like zoom, Google meet, Skype etc), computer/Laptop, Smartphones/tablets, Webcams, Microphones, Speakers/Headphones, Monitors/Projectors, Wi-Fi routers and Network Devices, Lighting Equipment etc

The above tools are useful in the following ways;-

### **Video Conferencing software;** To facilitate real-time video and audio communication among participants.

* **Zoom:** Offers high-quality video and audio, screen sharing, recording, and breakout rooms.
* **Skype:** Supports video calls, voice calls, messaging, and file sharing.
* **Google Meet:** Integrated with Google Workspace, provides video conferencing, screen sharing, and real-time captioning.

#### **Computers and Laptops used for;**

* **Hosting and Joining Meetings:** Participants use computers and laptops to host or join video conferences through video conferencing software such as Zoom, Skype, or Microsoft Teams.
* **Screen Sharing:** Allows participants to share their screens for presentations, document reviews, or demonstrations.

#### **Smartphones and Tablets: Used f**or participants who prefer mobile devices or are on the go can join video conferences/ online meeting from any location.

**Webcams**

* **Video Capture:** Provides visual feed of participants during the meeting.
* **Enhancing Video Quality:** External webcams often offer higher resolution and better quality than built-in laptop cameras.

#### **Microphones**

* **Audio Capture:** Ensures clear voice transmission, which is crucial for effective communication.
* **Reducing Background Noise:** High-quality microphones can help minimize background noise.

**Speakers/Headphones**

* **Audio Output:** Deliver clear sound to participants, ensuring they can hear others clearly.
* **Privacy and Clarity:** Headphones are particularly useful to avoid feedback and ensure privacy, especially in shared spaces.

**Monitors/Projectors:**

* **Large Display:** Useful for displaying video feeds and presentations to larger groups in a room.
* **Enhanced Visibility:** Ensures everyone in the room can see the content clearly.

**Wi-Fi Routers and Network Devices: for internet Connectivity this can p**rovide a stable and high-speed internet connection necessary for smooth video conferencing.

**Lighting Equipment: Improve Visibility:** Proper lighting ensures participants are clearly visible on camera.

**ITEM 1 (b)**

**Any 5x2=10 scores**

Precautionally to have a smooth and successful online meeting the following should be considered

* Check for sufficient battery or keep the device plugged in power, provide stable power for all other devices.
* Ensure a stable internet connection, preferably Wi-Fi for better stability, place the router in a central location to ensure even coverage and where necessary use wired connections (Ethernet) for critical devices to ensure stability. It is better to test internet speed and stability before the meeting
* Ensure webcam and microphone are working, test the speakers or headphones before the meeting to ensure they are working properly, use noise-cancelling headphones to reduce ambient noise and finally adjust volume levels to a comfortable setting.
* Use a stand or holder for a stable camera view, position the webcam at eye level for natural interaction and test it before the meeting to adjust settings.
* Ensure good lighting to enhance video quality, position lights to eliminate shadows on the face and adjust the intensity of the lights to create a balanced appearance
* Install necessary video conferencing apps.

### Conclusion (1 x1=1 score)

Using the right combination of tools effectively ensures a smooth online meeting. Each device plays a crucial role in enhancing communication and overall meeting quality. Proper setup and testing of these tools before the meeting are essential to avoid technical issues and interruptions.