QUESTIONS FOR O'LEVEL ICT (840) QUESTIONS AND ANSWERS

SET1

Item 1

Daphine has joined Makerere University in first year and has discovered that secretarial business around the university is doing well. She also intends to do business in photo editing since University students like taking photos. Last week she called her brother who lives in the United States and sent her a brand New desktop computer without any program on it. Daphine incidentally is not well versed with ICT much as she wants to do an ICT related business. She came to you as a friend for some technical advice concerning her business.

Task.

Provide advice on the ICT devices to buy for this business and show how she can put the new computer to use.

ICT Devices to Buy

Laptops and Desktops

- **Additional Laptops:** For portability and handling multiple tasks simultaneously.
- **Desktop Computers:** Daphine already has one, but another desktop could help with multitasking.

Printers

- **All-in-One Printer:** A printer that can print, scan, copy, and sometimes fax.
- **High-Quality Photo Printer:** Essential for photo editing and printing high-resolution images for customers.

Scanners

- **Flatbed Scanner:** For high-resolution scanning of documents and photos.
- **Document Scanner:** For quick scanning of documents, especially useful for the secretarial business.

Smartphones

- **Smartphones with Good Cameras:** For communication and capturing photos on-the-go.

Internet Connectivity

- **Wi-Fi Router:** To provide internet access.
- **Mobile Data Plan:** As a backup for internet connectivity.

Software and Services

Operating System Installation

- **Windows or macOS:** Depending on the desktop specifications and personal preference. Windows is generally more common for business use.

Office Software

- **Microsoft Office Suite or Google Workspace:** For word processing, spreadsheets, presentations, and email.

Photo Editing Software

- **Adobe Photoshop or GIMP:** For professional photo editing.
- **Lightroom:** For organizing and editing photos.

Desktop Publishing Software

- **Adobe InDesign:** For creating flyers, brochures, and other marketing materials.
- **Microsoft Publisher:** A more affordable option for desktop publishing.

Security Software

- **Antivirus Software:** Norton, McAfee, or Avast to protect against malware and viruses.
- **Firewall:** To provide additional security against unauthorized access.

Cloud Storage Services

- **Google Drive, Dropbox, or OneDrive:** For storing files and easy sharing with clients.

Email Services

- **Gmail or Outlook:** For professional communication and email management.

Presentation Software

- **Microsoft PowerPoint:** For creating presentations.
- **Google Slides:** An alternative, especially useful for collaboration.

How to Put the New Computer to Use

Set Up the Operating System

- **Install the OS:** Follow installation guides to set up either Windows or macOS.
- **Update the System:** Ensure all system updates are installed for security and performance.

Install Essential Software

- **Office Suite:** Install Microsoft Office or Google Workspace.
- **Photo Editing Software:** Install Adobe Photoshop and Lightroom or GIMP.
- **Desktop Publishing Software:** Install Adobe InDesign or Microsoft Publisher.
- **Security Software:** Install antivirus and firewall protection.

Internet and Email Setup

- **Connect to Wi-Fi:** Set up the Wi-Fi router and connect the desktop to the internet.
- **Set Up Email Accounts:** Configure professional email addresses using Gmail or Outlook.

Set Up Cloud Storage

- **Create Accounts:** Set up Google Drive, Dropbox, or OneDrive accounts.
- **Organize Files:** Create folders for business documents, photos, and customer work.

Printer and Scanner Setup

- **Install Drivers:** Follow the manufacturer's instructions to install printer and scanner drivers.
- **Test Devices:** Print and scan sample documents to ensure everything is working correctly.

Create a Backup Plan

- **External Hard Drive:** Regularly back up important files to an external hard drive.
- **Cloud Backup:** Use cloud storage as an additional backup solution.

Additional Tips

- **Learning Resources:** Encourage Daphine to take online courses or attend workshops to improve her ICT skills.
- **Customer Management:** Consider using software like Trello or Asana to manage customer projects and tasks.
- **Marketing:** Use social media platforms to promote her services and attract more customers.

SECTION B

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

PART I

Answer **one** item from this part.

Item 2

Project Zakike has shortlisted successful candidates for notification letters and appointments. Ms. Doreen Linda Otieno is among the shortlisted employees on organization payroll and has been assigned to a certain district. Upon reaching Wakiso district project manager, she was informed that she needs to obtain a National Identity Card from the National Identification and Registration Authority (NIRA) plus her transcripts or pass slips so that she can be included in the payroll system before the month ends. She was directed to visit an online form for quick access, but found it challenging because it required downloading the form, filling it, and submitting it online. Unfortunately, Doreen lacks ICT skills, making the process difficult for her.

Task:

Ms. Doreen Linda approaches you to guide her through the required procedure. Provide a write-up indicating the necessary steps and ICTs required at every level.

Solution

Ms Doreen needs tools that can create and distributing information. These may include computers, scanners, internet, smart phones among others. This guide will outline the steps and ICT tools required to help her navigate the process efficiently.

Steps and ICT Tools Required

Accessing the Online Form

Internet connection

Ms Doreen needs to access a stable internet connection in order to be able to open and find resources on www. She can achieve this by using wifi routers, Mifi or ethernet connectivity.

Internet Browser

Ms. Doreen needs to open an internet browser on her computer or mobile device. Popular browsers include Google Chrome, Mozilla Firefox, Safari, and Microsoft Edge. She should then enter the URL provided by the Wakiso district project manager to access the online form.

Downloading the Form

PDF Reader and Download Manager

After accessing the form online, Ms. Doreen needs to download it. Most forms are provided in PDF format, so she will need a PDF reader like Adobe Acrobat Reader or a built-in browser PDF viewer to download and open the file.

Filling Out the Form

PDF Editing Software

Ms. Doreen will need to fill out the downloaded form. If she has a PDF editor like Adobe Acrobat, she can fill the form directly on her computer. Alternatively, if she doesn't have a PDF editor, she can print the form, fill it out manually, and then scan it back into a digital format.

Scanning Documents

Scanner or Mobile Scanning App

Ms. Doreen needs to attach her transcripts or any other documents, she should use a scanner. If a scanner is not available, mobile apps like CamScanner, Adobe Scan, or Microsoft Office Lens can be used to capture high-quality scans using a smartphone camera.

Submitting the Form and Documents

Email or Online Submission Portal

Once the form is filled out and all required documents are scanned, Ms. Doreen will need to submit them online. This can typically be done through an email or a dedicated online submission portal. She should ensure all files are correctly named and attached before submitting.

Item 3

Your school has been selected to participate in the final international robotics competition with other schools from Tanzania, Dar es Salaam and the main event will take place in Tokyo Japan. However, the cost of transporting the entire robotics team to Japan is very expensive. The competition organizers have set up a digital platform where the teams can showcase their robots and compete in real-time, overcoming the geographical barriers and reducing the overall costs. As the president for ICT club in your school, you have been approached to set the system in your school to enable the competition take place.

Source: https://i.ytimg.com/vi/YLTxy2zzpqo/maxresdefault.jpg

Task:

Prepare a presentation on how the competition is going to be conducted with the use of ICTs.

solution

The application of ICT can easily address challenges caused by distance and high operational cost. Using ICT tools like the internet, digital cameras, computers, microphones among others can assist conduct a virtual environment and allow effective participation in the competitions.

Key Components of the ICT Setup

The internet

To ensure that the competition go on while participants are separated by distance, a connection must be established for communication among various centres. This can easily be achieved using the internet connection. The school needs to ensure a stable internet connection and use networking devices such as Wi-Fi routers, MiFi or modems to access internet on other devices.

Camera Setup

To ensure that the competition judges and other participants can clearly see the robots and the team's operations, digital and video cameras are required.

Microphones

Clear communication is critical during the competition for both presenting our work and responding to judges' questions.

Computers

Robust computers (desktops, laptops with high processing power) are essential for programming, controlling the robots, and managing the live stream.

Video conferencing tools

Relevant video conferencing software (zoom, google meet) needs to be installed ensure real time video communication among participating groups and judges.

Collaboration Platforms

Efficient collaboration tools (google drive, Dropbox, google docs.) are required to facilitate document sharing, real-time editing, and seamless communication within the team and with the competition organizers.

Part II

Answer **one** item from this part.

Item 4

A week ago, there was a fire in the main data center of a university. It caused a lot of damage. Thieves first stole some systems and then set the data center on fire. Several computers were destroyed, including the central database server that had important academic records and research data. While the firefighters were putting out the fire, they accidentally damaged some of the electronic equipment more, causing parts to be scattered on the place. The next day, the head of the department looked at the damage and thought the scattered parts couldn't be fixed. They told the maintenance staff to collect the broken ICT pieces. The damaged parts were put in huge containers and thrown away in a nearby stream.

Task.

a) As a student of ICT, how best the University should have dealt with that rubbish.

b) Advise the management of the University on the best practices to put in the data center after the incident

Solution

In the wake of the recent fire at the university's data center, it's crucial to adopt best practices for handling damaged ICT equipment and enhancing data center security. Proper disposal of electronic waste and implementing robust security measures can prevent future incidents and protect critical data.

Task A:

Handling Damaged ICT Equipment

Proper disposal and recycling of electronic waste are vital to prevent environmental damage and potential data breaches.

Best Practices:

Secure Disposal:

Prevent sensitive data from being accessed by ensuring all data is irretrievably erased from damaged equipment before disposal.

Recycling:

Electronic waste should be recycled to recover valuable materials and reduce environmental harm. Partnerships with certified e-waste recycling companies, Collection bins for sorting different types of electronic waste.

Reuse and refurbishing

The head of department should sort out electronics that could be repaired in order to extend their life instead of dumping them in the stream which can harm humans and the environment.

Designated drop-off-centers

Proper disposal of e-waste through designated drop-off centers (licensed dumping sites.) or adherence to local regulations for environmental protection (NEMA, KCCA).

Donating

Donating used electronics to non-profit organizations that provide low-cost or free technology to underserved communities instead of throwing them away.

EPR

Implementing extended producer responsibility (EPR) programs that require manufacturers to take back and recycle their products, incentivizing them to design devices that are easier to recycle or repair.

Task B:

Post-Incident Data Center Best Practices

Implementing comprehensive security measures can protect data, software, and hardware from future incidents.

Data Backup and Recovery:

Regularly backing up data ensures that critical information can be recovered in case of loss or damage by using Automated backup software (e.g., Acronis, Veeam), Off-site and cloud storage solutions (e.g., AWS, Google Cloud)

Physical Security:

Enhance physical security to prevent unauthorized access and damage to the data center. (Surveillance cameras and access control systems, Security personnel and alarm systems)

Fire Protection:

Install advanced fire detection and suppression systems to minimize damage from fires such as Smoke detectors and fire alarms, Fire suppression systems (e.g. sprinklers)

Environmental Controls:

Maintain optimal environmental conditions to protect hardware from damage eg through Environmental monitoring tools (e.g., sensors for temperature, humidity)

Data Encryption:

Encrypting data ensures that it remains secure even if physical devices are stolen or damaged. Encryption software (e.g., BitLocker, VeraCrypt)

Incident Response Plan:

Develop and regularly update an incident response plan to quickly address and mitigate the effects of any future incidents. Incident management software (e.g., ServiceNow, Jira), Regular training and drills for staff

Conclusion

Adopting these best practices will help the university manage the aftermath of the data center fire effectively and prevent future incidents. Ensuring proper disposal of damaged ICT equipment and implementing robust security measures will protect the university's valuable data and infrastructure.

Item 5

R and R Secondary School received a donation of outdated Pentium 1 and Pentium 2 computers from a former student in the UK. These computers were not usable due to their low specifications, so the school stored them in the computer laboratory and purchased modern computers instead. Senior One students were very excited and spent about 10 hours daily in the laboratory playing games, surfing their internet and doing their own work which led to health complaints as noted by the school nurse. The old donated computers are taking up valuable space and are not useful. The school has come to you seeking your guidance as an ICT student on these matters.

Task.

a) Advise the administration on the students' health complaints as reported by the school nurse.
b) Guide the administration on how to handle the donation of computers in the computer laboratory

Introduction

R and R Secondary School received outdated Pentium 1 and Pentium 2 computers, which are currently taking up valuable space. Additionally, excessive screen time by Senior One students has led to health complaints. As an ICT student, it is important to address these issues to ensure a healthy and efficient learning environment.

Task A: Addressing Students' Health Complaints

Prolonged screen time and improper ergonomic setups can lead to various health issues. Identifying and mitigating these causes is crucial for students' well-being.

Eye Strain

Extended periods of screen time can cause digital eye strain, leading to headaches and discomfort.

Mitigation Measures

- Take regular breaks
- Ensure screens have proper brightness and contrast settings.
- Use of LCD monitors rather than CRT
- Use antiglare screen or spectacles to reduce too much light
- Ensure proper lighting in the computer

Poor Posture

Sitting for long hours with improper posture can lead to back and neck pain.

Mitigation Measure

- Provide ergonomic chairs and adjustable desks.
- Encourage regular breaks to stand and stretch.

Repetitive Strain Injuries (RSI)

Continuous use of keyboards and mice can cause strain on the hands and wrists.

Mitigation Measure:

- Use ergonomic keyboards and mice.
- Teach proper hand positioning and encourage regular breaks.

Fatigue

Digital fatigue is the term is used to describe a state of mental exhaustion brought on by the excessive use of digital devices

Mitigation Measure:

- Take regular breaks
- Physical Exercises

Techno stress

Arises from the constant pressure of digital connectivity and the excessive use of electronic devices.

Mitigation Measure:

- Schedule regular breaks from screens

- Use apps that limit screen time and monitor usage.
- Design a comfortable workspace to reduce physical strain.

Task B:

Handling the Donation of Outdated Computers

The outdated Pentium 1 and Pentium 2 computers are not useful in their current state and take up valuable space. Properly managing these donations can free up space and possibly benefit others.

Assessment and Inventory:

Assess the condition of the donated computers and create an inventory.
- Identify any parts that can be reused or salvaged, and list all the equipment for proper record-keeping.

Secure Data Disposal:

Ensure any existing data on the old computers is securely erased to protect privacy.
- Use data erasure software to securely wipe all hard drives.

Recycling and Disposal:

Properly dispose of or recycle outdated equipment to prevent environmental harm.
- Partner with certified e-waste recycling companies for safe disposal.

Donation to Others:

Consider donating usable parts or computers to organizations that might benefit from them.
- Reach out to local community centers or schools in need of basic computer equipment.

Storage and Space Management:

Free up space in the computer lab by removing outdated equipment.
- Organize the lab to optimize space for modern equipment and ensure a conducive learning environment.

Upgrade the devices

Consider improving the specifications of the donated computers to suit the current requirements
- Replace the CPUs with better ones
- Increase the RAM and Hard disk space
- Upgrade the operating system

Conclusion

By addressing the health complaints and efficiently managing the outdated computer donations, R and R Secondary School can create a healthier and more productive environment for students.

SET2

SECTION A
Answer the Item in this section.

Item 1.

Today, in Uganda we have very many young artists in the music industry who are really talented and they really understand what they do and they do it with passion but most of them are challenged by lack of money to fund their projects, buy the necessary equipment's to help them output quality sound and videos to the standard and meet the public satisfaction. All these Artists have formed group called Uganda Upcoming Artists Association (UUAA). The government of Uganda has started an initiative to develop all youths with talents through Parish develop model (PDM), and the chairperson of UUAA is required to submit a proposal stating clearly whatever ICT tool needed, how it will help them achieve the goal and how to look after them to ensure their longevity, but UUAA has no member with ICT knowledge to guide as they write the proposal.

Task:

You have been approached by the chairperson of **UUAA** to help them. Come up with a written document to guide them.

Introduction

This proposal outlines the necessary ICT tools, their benefits, and maintenance strategies to ensure longevity and achieve the goal of producing high-quality artistic content.

ICT Tools and Their Benefits

High-Quality Audio Equipment such as Microphones to Capture clear and professional sound, essential for high-quality music production.

Maintenance: Regular cleaning, proper storage in a dry, dust-free environment.

Video Production Equipment such as Cameras and Lighting Kits. These Produces high-definition videos, enhancing the visual appeal of music videos.

Maintenance: Regular cleaning of lenses, proper storage, and careful handling to avoid damage.

Computers and Software

High-Performance Computers with Music and Video Editing Software (e.g., FL Studio, Adobe Premiere Pro) to Enables efficient editing and production of music and videos.

Maintenance: Regular software updates, virus protection, and hardware maintenance such as dust cleaning and component checks.

Digital Distribution Platforms

Subscription to Platforms like SoundCloud, YouTube, and Spotify, provides a global platform for artists to distribute and monetize their music.

Maintenance: Regularly update profiles and content, engage with audiences, and monitor analytics to improve content strategy.

Conclusion

By leveraging these ICT tools, the Uganda Upcoming Artists Association (UUAA) can significantly enhance the quality of their music and videos, reach a broader audience, and sustain their operations long-term. Proper maintenance and continuous education are key to ensuring these tools remain effective and beneficial.

BONUS ITEM

Mr. Ochwo a geography teacher in Luuka seed school is teaching about volcano eruption and land forms where learners have to look at how the process takes place hence need for a geography trip. However, the learners and the school at large can't afford the financial bit of it. So the teacher opted for videos and has the link below to use.
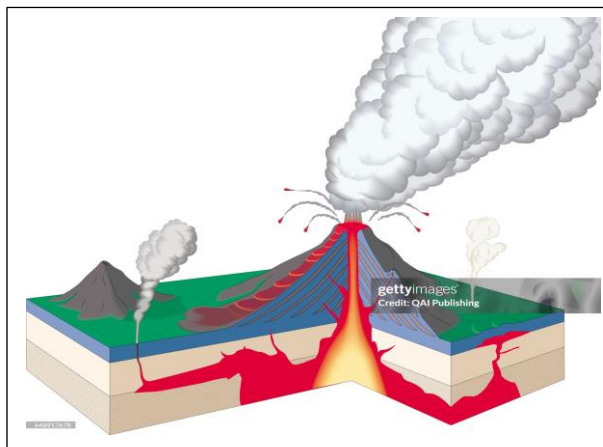
https:// www.naturelandforms.geo.ac

But Mr. Ochwo has little knowledge about ICTs and he's wondering how he can have a successful geography lesson in his class of over 300 students.

TASK:

Given that Mr. Ochwo has approached you, provide a write up to guide him.

Introduction

Teaching complex geographical processes like volcano eruptions and landforms can be challenging, especially with a large class of over 300 students. Using videos can be an effective way to illustrate these concepts. This guide will help Mr. Ochwo effectively use ICT tools to enhance his geography lesson.

Step-by-Step Guide for Mr. Ochwo

Internet connection: ensure you have access to a stable and reliable internet connection to be able to access online and www resources.

Ensure Video Accessibility: Check the provided video link to ensure it is accessible and the content is relevant to the lesson. Download the video beforehand to avoid any internet connectivity issues during the class.

Projector and Screen: Allows all students to view the video clearly. Set up a projector and screen in the classroom. Test the equipment before the lesson to ensure it works properly. Position the screen so it is visible to all students and ensure the room can be adequately darkened.

Speakers: Ensures that all students can hear the audio in the video clearly. Connect external speakers to the computer or projector. Test the audio to make sure it is loud and clear enough for all students to hear.

Printer: Provide printed or digital handouts with key terms, diagrams, and additional information about volcano eruptions and landforms to supplement the video.

Interactive Whiteboard: Allows dynamic teaching and interaction with the video content. Use an interactive whiteboard to annotate the video, highlight key points, and draw diagrams. Practice using the interactive features beforehand to ensure smooth delivery during the lesson.

Conclusion

By following these steps, Mr. Ochwo can effectively utilize ICT tools to enhance his geography lesson on volcano eruptions and landforms. This approach not only makes the lesson engaging and interactive but also ensures that all students can benefit from the content, despite the large class size.

SECTION B
This section has two parts: **I** and **II**
PART I
Answer one Item from, this part

Item 2.

A certain parent visited Trishla bookshop to purchase scholastic materials for her children, paid part of the money and was issued a written receipt indicating the amount paid and the balance. After a month, with the receipt misplaced, the parent goes back to pay the balance but the cashier finds difficulty in finding the duplicate of the receipt due to the very many receipt books and customers attended to. This is because they mostly rely on paper files which in most cases brings about these challenges.

Task

Assuming you have been contacted to offer your ICT knowledge to Trishla bookshop. Prepare a document to guide them on how to solve the above challenges.

Introduction

Managing paper receipts can be challenging, leading to issues such as lost receipts and difficulty in tracking transactions. By applying ICT tools, Trishla Bookshop can streamline its receipt management process, improve efficiency, and enhance customer satisfaction. This guide provides a comprehensive solution to address the challenges faced by the bookshop.

Proposed ICT Solutions

Implement a Point of Sale (POS) System. A POS system integrates sales, inventory, and customer management into one platform, making it easier to track transactions and generate digital receipts.

Research and select a suitable POS system (e.g., Square, Lightspeed, or Shopify POS) and Train staff on how to use the POS system.

Benefits:

- Centralizes transaction records.
- Automates receipt generation and storage.
- Enhances inventory management.

Digital Receipt Management. Digital receipts can be stored electronically, making it easier to retrieve them when needed.

- Configure the POS system to generate and send digital receipts.
- Inform customers about the option to receive digital receipts.
- Regularly back up receipt data to secure storage.

Benefits:

- Reduces the risk of lost receipts.
- Simplifies the process of locating and printing duplicates.
- Provides customers with the option to receive receipts via email or SMS.

Customer Database and Loyalty Program. Maintaining a customer database helps in tracking purchase history and managing customer relationships.

- Use the POS system to create and maintain a customer database.
- Encourage customers to join a loyalty program for better tracking and rewards.
- Regularly update customer information.

Benefits:

- Simplifies the process of locating past transactions.
- Enhances customer service by personalizing interactions.
- Supports marketing and loyalty programs.

components or things needed to setup the ePOS:

Hardware Components:

- Touchscreen Monitor: Displays the interface for the cashier or salesperson to interact with the system.
- Barcode Scanner: Reads product barcodes to quickly and accurately input item information into the system.
- Receipt Printer: Prints transaction receipts for customers.
- Card Reader: Facilitates electronic payments via credit or debit cards, and other contactless payment methods like mobile payments.
- Customer Display: Shows transaction details to customers in real-time.

Software Components:

- Choose an Accounting Software: Consider cloud-based options like QuickBooks Online, Xero, or Wave
- Sales Processing Software: Handles the checkout process, including item scanning, price calculation, tax application, and payment processing.

Conclusion

By implementing these ICT solutions, Trishla Bookshop can overcome the challenges of managing paper receipts, streamline its operations, and enhance customer satisfaction. Transitioning to a digital system will not only improve efficiency but also provide a more reliable and secure way to handle transactions and customer data.

Item 3.

Mukofo Ltd is a leading company in Uganda dealing in printing equipments, consumables in such printing equipments and electronic equipments commonly demanded for locally. The company usually dispose their unusable resources in the nearby field. Of recent the local authority has raised concern on how they manage their e-waste. Due to the concern raised, the company is sourcing for a knowledgeable personnel to help them curb the adverse effects.

Task

You have been chosen as the most knowledgeable person by the company, prepare a presentation you will use to address the local authority's concern.

Introduction

Mukofo Ltd, a prominent company in Uganda specializing in printing and electronic equipment, has received concerns from local authorities regarding the management of e-waste. As the chosen expert, I propose the following solutions to address these concerns effectively.

E-Waste Management Solutions

Establish an E-Waste Collection and Recycling Program. Create designated e-waste collection points at Mukofo Ltd facilities where customers and staff can return used electronic equipment.

- Set up clearly marked e-waste bins.
- Advertise the program to customers through in-store signage, social media, and newsletters.

Partner with Certified E-Waste Recyclers. Collaborate with certified e-waste recycling companies to handle collected electronic waste.

- Identify and vet reputable e-waste recyclers.
- Formalize agreements detailing the responsibilities and processes for recycling.

Implement an E-Waste Management Policy. Develop a comprehensive policy that outlines the procedures for handling, storing, and disposing of e-waste.

- Draft the policy in consultation with environmental experts.
- Train employees on the policy and its implementation.

Conduct Regular E-Waste Audits. Perform periodic audits to assess the volume and type of e-waste generated and ensure proper disposal practices are followed.

- Schedule regular audits (e.g., quarterly).
- Document findings and recommend improvements.

Launch E-Waste Awareness Campaigns. Educate employees and customers about the importance of e-waste management and how they can contribute.

- Create informative materials (brochures, posters, videos).
- Host workshops and seminars.

Introduce Take-Back Programs. Offer programs where customers can return old equipment when purchasing new items.

- Develop a process for accepting and safely storing returned items.
- Provide incentives for participation, such as discounts on new purchases.

Utilize Environmentally Friendly Packaging. Shift to eco-friendly packaging for all products to minimize waste.

- Source biodegradable or recyclable packaging materials.
- Inform customers about the eco-friendly initiative.

Adopt Green Procurement Practices. Purchase electronic equipment and consumables from suppliers who adhere to environmentally friendly practices.

- Develop a procurement policy that prioritizes green suppliers.
- Evaluate suppliers based on their environmental practices.

Implement a Data Management System. Use a digital system to track e-waste from collection to disposal, ensuring transparency and accountability.

- Choose a suitable e-waste management software.
- Train staff on how to use the system.

Report to Local Authorities. Regularly update local authorities on the company's e-waste management practices and progress.

- Compile regular reports detailing e-waste collection, recycling efforts, and outcomes.
- Engage in dialogue with authorities to ensure compliance and address concerns.

Conclusion

By implementing these e-waste management solutions, Mukofo Ltd can effectively address the concerns raised by local authorities, ensuring environmentally responsible practices and enhancing the company's reputation as a leader in sustainability.

PART II
Answer one Item from, this part

Item 4.

Mr. & Mrs. Kakaire have their Daughter suffering from heart problem and the Ugandan doctors have referred them to India. Due to financial constraints the family could only manage the funds for the surgery and upkeep for only two members thus the mother and daughter are the only ones that went. On reaching India the mother realized that she had forgotten the consent form the father signed plus a copy of his national ID yet these documents are required by the hospital authority to allow the surgery take place. Due to limited knowledge of ICT Mr. Kakaire has approached you and he needs your help.

Task

Prepare a write up indicating clearly the ICTs and Steps required that Mr. Kakaire can follow to submit the documents successfully.

Introduction

Mr. Kakaire needs to send important documents—the signed consent form and a copy of his national ID—from Uganda to India to facilitate his daughter's surgery. This guide outlines the steps and ICT tools required to submit these documents successfully.

ICT Tools Required

1. **Smartphone or Digital Camera**: To capture high-quality images of the consent form and national ID.
2. **Scanner**: For creating digital copies of the documents (if available).
3. **Computer or Smartphone**: To access the internet and use email or cloud storage services.
4. **Internet Connection**: Reliable access to the internet for uploading and sending the documents.
5. **Email Service**: An email account to send the documents (e.g., Gmail, Yahoo, Outlook).
6. **Cloud Storage Service**: An optional tool for uploading and sharing documents (e.g., Google Drive, Dropbox).

Steps to Submit the Documents

Capture Images with a Smartphone or Camera: Use a smartphone or digital camera to take clear photos of both the signed consent form and the national ID. Check the images to ensure they are clear and legible.

Scan the Documents (if available): If a scanner is available, scan the consent form and national ID.Save the scanned documents in a standard format (e.g., PDF or JPEG).

Uploading the Documents

Using Email,

- Open the email application on your smartphone or computer (e.g., Gmail).
- Compose a new email.
- In the subject line, write a clear description (e.g., "Consent Form and National ID for Surgery").
- Attach the images or scanned files of the consent form and national ID.
- In the body of the email, include a brief message explaining the purpose of the documents.
- Enter the recipient's email address (provided by the hospital) and send the email.

Using Cloud Storage (optional):

- Open a cloud storage service (e.g., Google Drive, Dropbox) on your smartphone or computer.
- Upload the images or scanned files to the cloud storage.
- Once uploaded, generate a shareable link to the documents.
- Open your email application, compose a new email, and include the shareable link in the message body.
- In the subject line, write a clear description (e.g., "Consent Form and National ID for Surgery").
- Enter the recipient's email address (provided by the hospital) and send the email.

Conclusion

By following these steps, Mr. Kakaire can successfully submit the necessary documents to the hospital in India using ICT tools. This process ensures that his daughter's surgery can proceed without further delays. If any issues arise, Mr. Kakaire should seek assistance from someone familiar with using these technologies.

Item 5.

MWANYI coffee farmers group in masaka has been facing challenges of poor coffee yields in the recent years and the chairperson of the group through consultations he was assured by a friend that there is information in a pdf document on the National Agriculture Research Organization (NARO) website which can help them improve on coffee farming. However, the chairperson has no knowledge on how to reach and get the document.

Website: https://naro.go.ug

Address. Plot 11-13, Lugard Avenue, Entebbe - *Uganda*;
Postal address: P.O Box 295, Entebbe
Telephone contact: +256-41-320512, 0417888002/3;
Email: info@naro.go.ug.
Open Hours:. 09:00am to 4:00pm (Monday to Friday)

Task

a) Guide the chairperson through the required procedures indicating the necessary steps and ICTs to be used.
b) Demonstrate how the chairperson can distribute this information to the rest of the group members.

Introduction

MWANYI coffee farmers group in Masaka is seeking to improve their coffee yields. The National Agriculture Research Organization (NARO) website contains valuable information that can help. This guide will walk the chairperson through accessing the document on the NARO website and distributing it to the group members.

Part A:

Accessing the PDF Document from the NARO Website

ICT Tools Required:

1. Computer or Smartphone
2. Internet Connection
3. Web Browser (e.g., Google Chrome, Mozilla Firefox)
4. PDF Reader (e.g., Adobe Acrobat Reader)

Steps to Access the PDF Document

1. **Connect to the Internet**: Ensure the device (computer or smartphone) is connected to a reliable internet source.
2. **Open a Web Browser**: Launch a web browser on the device.
3. **Visit the NARO Website**: In the browser's address bar, type `https://naro.go.ug` and press Enter.
4. **Navigate to the Relevant Section**: Look for sections related to research publications, resources, or downloads on the NARO homepage. This might be under headings like "Research," "Resources," or "Publications."
5. **Search for Coffee Farming Information**: Use the website's search function if available, by typing keywords such as "coffee farming" or "coffee yields improvement."
6. **Locate the PDF Document**: Browse through the search results or publications list to find the document that pertains to coffee farming.
7. **Download the PDF Document**: Click on the link to the PDF document. This should open the document in the browser. Look for a download button (often represented by a downward arrow) to save the document to the device.
8. **Open the PDF Document**: Once downloaded, use a PDF reader to open and review the document.

Part B: Distributing the Information to Group Members

ICT Tools Required:

1. Computer or Smartphone
2. Internet Connection
3. Email Account
4. Messaging App (e.g., WhatsApp)
5. Printer (if distributing hard copies)

Steps to Distribute the Information

1. **Using Email**:

   - Open an email application or webmail service.

- Compose a new email.
- Attach the downloaded PDF document.
- Write a brief message explaining the content and its importance.
- Enter the email addresses of the group members and send the email.

2. **Using Messaging Apps (e.g., WhatsApp)**:

- Open the messaging app on the smartphone.
- Select the group chat or individual contacts to share the document.
- Use the attachment feature to upload and send the PDF document.
- Add a brief message to provide context for the document.

3. **Using Cloud Storage Services (e.g., Google Drive, Dropbox)**:

- Upload the PDF document to a cloud storage service.
- Generate a shareable link to the document.
- Share the link via email or messaging apps with the group members.

4. **Printing Hard Copies**:

- Connect the device to a printer.
- Print multiple copies of the PDF document.
- Distribute the printed copies during group meetings or visits.

Conclusion

By following these steps, the chairperson of MWANYI coffee farmers group can access valuable information from the NARO website and efficiently distribute it to all group members. This ensures that everyone has the necessary knowledge to improve coffee yields and enhance farming practices.

ICT 840/2

Item 1

Teachers at Kirungi Primary School have been creating student report cards by hand, filling in marks with pens. The results of the pupils have consistently contained mistakes due to this manual method, and it has always been difficult to correct these errors. Analysis has always been used to identify the top students in the class, average marks received, positions of students, and comments on report cards. The management of the school made the decision to begin utilizing computers to work on students' reports after attending a training on ICT in schools. Since the pupils are expected to return home with their report cards in the next two days, none of the teachers is able to do this duty, therefore they have turned to you for help.

The Director of Studies has provided you with P.5 data about students' performance in Second Term 2024 in **support file folder kirungi.docx** and a sample report card provided in the same folder.

Task.

Create P.5 report cards showing the required information basing on the provided data.

Item 2

Sunrise Technical Institute (STI) is a vocational training center located in Hoima City, 6 KM from the central business district of Hoima. It has been in operation for 5 years and offers various programs including building and construction, computer Repairs, graphic design, and tailoring. Despite distributing many flyers and brochures throughout the western and central area, radio announcements and publications of termly magazines, they have been unable to attract a big number of students. The Board of Directors has concluded that they need to strengthen their marketing and advertising efforts to reach a global audience, showing their different courses, the experienced staff, and the best technologies used in the Institute. However, they are not sure how to effectively reach and appeal to a worldwide audience and encourage students to apply for admissions at their from any part of the world. They have been advised to seek your assistance to address this issue since you are ICT competent. They have provided you with Institute pictures taken over time in **support folder STI Support.**

Task.

Create a solution that will help Sunrise Technical Institute address its problem.