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



UGANDA NATIONAL EXAMINATIONS BOARD

Uganda Certificate of Education

INFORMATION AND COMMUNICATIONS TECHNOLOGY(ICT)

Paper 1 Theory

New Lower Secondary Curriculum

SCORING GUIDE

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ITEM I

Competency (Basis of assessment)	Evidence: Skill/ability exhibited/Score	SCORE
Provides a focused introduction	Produces a focused introduction	01
Describes a minimum number of ICT tools/software that are required to setup a functional system.	 Identifies and describes 5 or more of the listed ICT tools/Software which will help Isaac improve his services and retain customers Computer set Digital camera Scanner Printer 	04
	 Application Software Identifies and describes 3-4 of the listed ICT tools/Software which will help Isaac improve his services and retain customers 	03
	 Identifies and describes 1-2 or more of the listed ICT tools/Software which will help Isaac improve his services and retain customers 	02
	 Identifies and describes 1 of the listed ICT tools/Software which will help Isaac improve his services and ration customers 	01
	 No response 	00
Explains maintenance of ICT tools in good	• Identifies and explains 5 or more management measures of the listed ICTs/software	04
working condition	 Identifies and explains 3-4 management measures of the listed ICTs/software Identifies and explains 1 2 management measures of 	03
	 Identifies and explains 1-2 management measures of the listed ICTs/software Identifies only 1 management measure of the listed 	01
	ICTs/software	00
Conclusion	Provides a relevant conclusion (solution/judgement/recommendation)	01
Format of presentation	A formal document: Either a Report, a letter, a CV or Proposal	01

Competences	Basis of	Expected responses	
	assessment		
T1(a-c)	Mentioning	• needs a desktop computer/Laptop with at least a i5 core processor(4.0GHz), 500GB of hard disk and 4GB of RAM. This	
T2(a-d)	relevant tools	computer will be capable of handling the kind of work at Mr	
		Bogere's business since he will be in position to process	
T15(a-c)		documents edit photos as required by his clients	
T16(a)			
110(C)		• Un interruptible power supply unit This device helps the user to	
T9 (a)	Explaining how the	continue working for a short time in case power goes off. This	
		enables a user to save the client's work. The UPS will be	
T10(a)	tool is used	connected to the wall socket, then the computer and its devices	
$T_1 2 (a)$		get from it. It also regulates the voltage reaching the devices.	
112(a)			
		• The software. Software means electronic instructions that help	
		the hardware accomplish tasks.	
		• To prepare formal letters, business reports and organizing	
		statistical data. For that he needs to obtain MS office suite.	
		• In order to produce good photos and passport size photographs,	
		He should install Adobe suite with packages such as photoshop,	
		illustrator which can be used for photo editing.	
		• The printer. A printer is a peripheral device that converts soft	
		copy into hard copy. Digital-colored all in one printer with a	
		speed of about 20 pages per minute to handle tasks such as	
		scanning, printing passport size photos, formal letters and	
		business reports and so on. A printer is connected to a computer	
		using a data cable then its drivers can be installed.	
		• has clients who inquire about photos. A digital camera will be	
		used for taking clients photographs and passport size photos.	
		I ne pnotos can then be transferred from the camera to the	
		Computer using USB cables, edited and then printed.	
		• For clients with hard copies to be converted to softcopy, the tool	
		needed is a scanner. This changes hard copy into soft copy.	
		• Cover ICT tools to avoid dust	
		• Installing antivirus to protect ICT against virus attacks.	
		• Use UPS to protect ICT tools from unstable power supply.	
	Management/	• Switch off ICT tools after use	
	maintenance	• Regular servicing of ICT tools to keep them in good working	
		conditions.	
		Regular updating of software	

ITEM 2		
Competency (Basis of assessment)	Evidence: Skill/ability exhibited/Score	Score
Provides a focused introduction	Produces a focused introduction	01
Explains the causes of breaking into the lab and theft of computer	 Identifies and explains <i>more than 4</i> causes of insecurity in the laboratory. Identifies and explains <i>4</i> causes of insecurity in the 	04
lab equipment	 Identifies and explains 2-3 causes of insecurity in the 	03
	 Identifies and explains <i>1</i> causes of insecurity in the 	02
	No response	UI
		00
		01
D 11		00
Provides security measures and mitigation for improper-waste management	 Explains 3 measures, identifies key stake holders and their roles in e-waste management (1 measure for each listed stakeholder) School Administration Lab Attendant Students 	04
	 Community Explains less than 3 measures and identifies key stake 	03
	 holders in e-waste management of the listed stakeholders Identifies and explains <i>more than 4</i> measures of insecurity in the laboratory. 	02
	 Identifies and explains 4 measures of insecurity in the laboratory. 	01
	• Identifies and explains 2-3 measures of insecurity in the laboratory.	00
	 Identifies and explains <i>1</i> measure of insecurity in the laboratory. No response 	
Conclusion	Provides a relevant conclusion	01
Format of the	A formal document	01
presentation		

T1 d	Explains the causes of	- Weak doors, these make breaking in or forceful entry
T14 (a-c)	breaking into the lab	easier. This can be solved by using strong metallic doors
T16 (a&b)	and theft of computer	with strong burglar proofing.
	lab equipment and	- Weak or easy to manipulate locks/pad locks. These
	provide suitable	become easy to break or open. It can be solved by using
	mitigation/measures.	strong locks or padlocks.
		- We can also use access control systems e.g., use of key
		cards or biometric scanners to control physical access
		- Exposure of important hardware components e of the
		server, external hard drives (keeping them in easy to reach
		areas. These have to be locked away in drawers, cabins or
		kept out of the computer laboratory
		Eailure to monitor the computer laboratory especially in
		the night when its not in use. This gives ample time to
		the light when its not in use. This gives ample time to thieves to plan and steal. It can be overcome by installing
		CCTV cameras/24/7 Surveillance systems
	Approaches that can	- It can also be solved by installing alarm systems that can
	he taken to ensure	go off and produce poise to potify the security personnel
	nroner e weste	on the forceful entry
	management and the	- Failure to mark label hardware components which makes
	how they can be	them easy to target and also difficult to find or trace in
	applied	case of theft. Asset tagging or labelling makes it easy to
	appricu	track for items when stolen, we can also attach tracking
		devices to the important hardware components like the
		Server computer
		- Inadequate Physical Inspection. There's supposed to be
		- madequate 1 hysical hispection. There is supposed to be
		any potential damage
		- Discarded computer components contain toxic substances
		like lead mercury etc. these pollute soil and water. The
		school administration/teachers can reuse some of these
		components e g by crafting them onto display boards for
		demonstration
		- Improper e-waste disposal may lead to data breaches and
		identity theft. You may not know who will nick on the
		hard disk flash disk and any other storage media you
		throw to the dust hin. The lab attendant may first try to
		repair or take the component for repair to extract off the
		information
		- Health risks: improper handling and discarding of e-waste
		can cause health issues such as skin disorders, respiratory
		disorders etc. to people such as waste pickers, children Its
		important therefore to sensitize the school
		community/students on the right means of handling e-
		wastes
		-You can also donate the out of use computers and other
		components to ICT renair shops
		- Air pollution Once thrown at the garhage nit hy say lab
		attendant e-waste may be hurnt which exposes the
		community to harmful gasses. The school administration
		may sell off or donate the hardware components that are
		no longer in use.

Competences B	Basis of assessment	Expected responses

ITEM 3

Competency (Basis of assessment)	Evidence: Skill/ability exhibited/Score	
Provides a focused introduction	Produces a focused introduction	01
Explains the consequences of continuous use of ICT	 Identifies and explains 6 or more causes/consequences of ICT usage from the listed categories. (2 for each of the mentioned challenges) -health issues, -data loss and -breach of privacy 	04
	 Identifies and explains 4-5 causes/consequences of ICT usage from the listed categories. Identifies and explains 2-3 causes/consequences of ICT 	03
	 Identifies and explains 2 of causes, consequences of ICT usage Identifies and explains 1 cause/consequence of ICT usage 	02
	 No response 	01
		00
Provides mitigation/measures	 Identifies and explains 6 or more measures for the listed categories of challenges. (2 for each of the listed challenges) -health issues, -data loss and -breach of privacy 	04
	 Identifies and explains 4-5 measures for the listed categories of challenges. Identifies and explains 2-3 measures for the listed 	03 02
	 Identifies and explains 2-3 measures for the listed categories Identifies and explains 1 measure for the listed categories 	•=
	 Identifies and explains I measure for the listed categories of challenges. No response 	01
	• No response	00
Conclusion	Provides a relevant conclusion	01
Format of the presentation	A formal document	01

Assesses system security,	Consequences of	Consequences of continuous use of ICT tools.
safely uses ICTs and	exposure to ICTs and	Malware attacks like
manages E-wasie	the mitigation strategies	- Computer viruses. Copy themselves and corrupt the system
Topic 1 d		<i>Mitigation.</i> Install an anti-virus, regularly update it
Topic 7 c		and scan to detect, disinfect and delete viruses.
Topic 8 (a-c)		
Topic 16 (a-b)		- Trojan horses. Appears legitimate but performs
		malicious tasks
		- Worms. Self-replicate after breaching the system
		among others Mitigation Do not use pirated software as this can be
		an entry point for Trojans and worms.
		- Phishing. sending emails that appear legitimate in
		order to induce individuals to reveal personal
		information
		Mitigation. Do not download information or open e-
		mails from untrusted sources
		- Eavesdropping/sniffing/spoofing. it involves
		intercepting and reading the data packets traversing
		through the network
		Mitigation. Encrypt the information travelling over
		the network
		- Denial of Service (DoS) This overwholms the
		network with excessive requests that exhaust the
		resources and make it inaccessible
		- Distributed Denial of Service (DDoS). The traffic
		flooding the network comes from multiple sources.
		Mitigation. Use of firewalls to block traffic from
		suspicious sources
		- Short circuits. Caused by naked wires, power
		surges and liquid spills.
		Mitigation. Insulate all naked wires, don't brink
		liquids next to the ICTs and use UPS/ voltage
		stabilizers Health ricka
		Fiedun risks - Eve defects like blurred vision, itchy, dry or red eyes
		<i>The appendix like burred vision, ucry, ary or rea eyes.</i> <i>mitigation.</i> Use anti – glare screens
		- Back pain, caused by sitting in a bad posture or for
		long
		mitigation. Sit upright and get poses or breaks while
		- Wrist pain, caused by injury, over use of the hand or
		repetitive stress.
		Mitigation. Set your work station right to avoid
		straining the hand, get breaks while using a
		computer and exercise ine hand

ITEM 4

Competency (Basis of assessment)	Evidence: Skill/ability exhibited/Score	Score
Provides a focused introduction	Produces a focused introduction	01
Describes procedure	 Identifies <i>6 or more</i> relevant steps with the necessary ICT tools Identifies <i>4-5</i> relevant steps with the necessary ICT tools Identifies <i>2-3</i> relevant steps with the necessary ICT tools. Identifies 1 relevant step No response 	04 03 02
		01 00
Follows a logical flow	Complete logical flow. Partial/incomplete Logical flow No logical flow	02 01 00
Conclusion	Provides a relevant conclusion (solution/judgement/recommendation)	01

Competences	Basis Of Assessment	Expected Responses
T3 (a,b)	Steps/processes/procedures	- Stage 1: Converting academic documents
T7 (a,b)	Followed to apply	from hard copy to soft copy
T11 a	online	Tools: scanners, scanning apps like CamScanner (CS),
		PC
		Application:
		get the document
		open the flatbed scanner cover
		place it there and cover,
		then press the scan button and save the documents.
		Stage 2: Creating a CV
		Tools: PC, desktop publishing or word processing
		software
		Application: start the computer.
		Go to all programs,
		Choose the appropriate MS-Publisher, Choose Resume,
		blank, then create. Design according to the layout
		apply appropriate graphics
		save the publication as CV on a hard disk/flash
		disk/phone/CD/email.
		Stage 3: Typing an application letter by use of Word
		processors
		Tools: PC, Word processors
		Application: Start the computer.
		Go to all programs, Choose blank document,
		type the letter, edit, format and save the document as
		Application Letter on a hard disk/flash

	disk/phone/CD/email.
	Stage 4: convert all documents to PDF
	Tools: PC, word processor, Desktop publisher
	Application:
	Open the document of interest
	Select file, save as
	Set the save as type to pdf and save
	Stage 5: greating on amail
	Tools: PC web browser
	Application: Open a web browser like google chrome
	Enter amail com in the web address
	Enter gmatt.com in the web address
	Chasse the type of account (nersonal account)
	Enter your personal information a gurnama first name
	Einer your personal miorination e.g. sumanie, mist name,
	aliah name and password, commini password
	click next and enter your phone number
	verify your account with the code sent to your phone
	Stage 6: attaching the files (application letter,
	academic documents and CV) on online platform i.e.
	email
	Tools: PC, Web browser
	Application:
	Open your e mail
	Select compose
	Enter the recipient's address (<u>info@sjs.ac.ug</u>)
	Compose a greeting line
	Select the attach button and browse to find the files
	(application letter, CV and academic documents)
	Select send.

ITEM 5

Competency (Basis of assessment)	Evidence: Skill/ability exhibited/Score	Score
Provides a focused introduction	Produces a focused introduction	01
Describes procedure	• Identifies <i>6 or more</i> relevant steps with the necessary ICT tools	04
	 Identifies 4-5 relevant steps with the necessary ICT tools Identifies 2-3 relevant steps with the necessary ICT tools 	03
	 Identifies 1 relevant step 	02
	No response	01
		00
Follows a logical	Complete logical flow.	02
flow	Partial/incomplete Logical flow	01
	No logical flow	00
Conclusion	Provides a relevant conclusion	01
	(solution/judgement/recommendation)	

Competences	Basis Of Assessment	Expected Responses
T3 a,b	Describes relevant	-Access a computer
T7 a,b	steps	-Downloading the form
T11 a		from the web
T13 a		-Filling the form
		-Taking some photos
		about the project
		-Printing the photos and
		forms
		-Scanning the filled
		forms& photos
		-Uploading the to the
		website
	Describes ICT tools	- Computers
	used.	- camera
		- printer
		- scanner
		- flash disks
		- CDs
		- Modem
		- Mobile phones
	Procedure	-computer-(to access the
		website

	(
	-camera-(to take pictures
	of the projects)
	-printer(print out the
	downloaded form and
	photos)
	-scanner(scanning the
	filled forms for
	uploading)
	-flash disk(storage of
	forms to fill just in case)
	-CD-(to store the soft
	copies for future use)
	-modem(connect to
	internet)
	-phone(taking mobile
	photos and
	communication)
logical flow of steps	