S.4 INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) Paper 1 SCORING GUIDE

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 to deliver the presentation Computer set Digital camera Scanner Printer	04
	 Application Software Identifies and describes 3-4 of the listed ICT tools/Software or more of the listed ICT tools/Software to deliver the presentation 	02
	Identifies and describes 1-2 or more of the listed ICT tools/Software or more of the listed ICT tools/Software to deliver the presentation	01
	Identifies and describes 1 of the listed ICT tools/Software or more of the listed ICT tools/Software to deliver the presentation	00
	No response	
Explains maintenance of ICT tools in good	 Identifies and explains 5 or more management measures of the listed 	04
working condition	ICTs/softwareIdentifies and explains 3-4 management	03
	measures of the listed ICTs/softwareIdentifies and explains 1-2 management	02
	measures of the listed ICTs/software Identifies only 1 management measure of	01
	the listed ICTs/software No response	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

Competenc es	Basis of assessme	Expected responses
	nt	
T1(a-c)	Mentionin g relevant	Computer/Laptop - Data processing
T2(a-d) T15(a-c)	tools	Projector/smart board/screen/interactive white board – Displaying head teacher's speech on a bigger screen.
T16(c) T9 (a)	Explaining how the tool is used	Printer- Producing copies of school rules and regulations.
T10(a)		Public address system - Output head teacher's speech during assembly and Micro phone - To
T12(a)		capture head teacher's speech into a computer, mixer, amplifier.
		 Presentation software - To organize head teacher's slides for presentation / Word processor - Creating a document e.g. school rules and regulations.
		others
		Storage media e.g. flash disk - Transferring head teacher's presentation for either printing or displaying to the audience.
		Photocopier - Duplicating head teacher's document. 8. Public Address system - To amplify the head teacher's speech
	Management/	Scanner/Scanning app to capture hard copies of the head teacher's document into soft copy
	maintenance	Internet - Sharing information.
		Digital camera - for capturing invests in school
		 Cover ICT tools to avoid dust Installing antivirus to protect ICT against virus attacks.
		Use UPS to protect ICT tools from unstable power supply.
		Switch off ICT tools after use
		Regular servicing of ICT tools to keep them in good working conditions.
		Regular updating of software

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	Identifies and explains <i>6 or more</i> causes/consequences of ICT usage from the listed categories.	04
computer lab equipment	(2 for each of the mentioned challenges) -health issues,	03
	-data loss and -breach of privacy	02
	 Identifies and explains 4-5 causes/consequences of ICT usage from the listed categories. 	01
	• Identifies and explains 2-3 causes/consequences of ICT usage from the	00
	listed categories.Identifies and explains 1 cause/consequence of	01
	ICT usage from the listed categories. No response	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 Community Explains less than 3 measures and identifies key stake holders in e-waste management of the listed stakeholders Identifies and explains more than 4 measures of insecurity in the laboratory. Identifies and explains 4 measures of insecurity in the laboratory. Identifies and explains 2-3 measures of insecurity in the laboratory. Identifies and explains 1 measure of insecurity in the laboratory. No response 	04 03 02 01 00
Conclusion	Provides a relevant conclusion	01
Format of the presentation	A formal document	01

T1 d T14 (a-c) T16 (a&b)

Explains the Health issues, causes and mitigation/preve ntions

- Back ache caused by poor sitting posture, prolonged use, substandard furniture mitigated by Use of ergonomic furniture, Should sit upright, Always have frequent breaks
- Headache caused by Prolonged use, Too much light, Noise due to vibrations of some ICT tools egg earphones/headsets mitigated by Having breaks, Regulate the light by using screen filters, Regulate the sound in the ears by reducing the volume of the head sets
- Eye defects like blurred vision, itchy, dry or red eyes. Mitigation. 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 using a computer
- 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 the hand
- Neck pain, caused by poor monitor position mitigated by parallel positioning of the monitor
- Fatigue caused by prolonged use mitigated by having breaks
- Skin cancer caused by EMR
 (electro-magnetic radiations) from
 monitor mitigated by adopting the
 use of green computing i.e., use of
 monitors that don't produce a lot of
 radiations, sit in a reasonable
 distance from the monitor
- Deep vein thrombosis (Blood clot in the veins) caused by immobility (Not moving for a long time) mitigated by exercise

Approaches that can be taken to ensure proper e waste management and the how they can be applied

- Muscle twitching (involuntary contraction of the muscles) caused by prolonged sitting mitigated by exercise
- 1. 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.
- 2. Improper e-waste disposal may lead to data breaches and identity theft. You may not know who will pick on the hard disk, flash disk and any other storage media you throw to the dust bin. The lab attendant may first try to repair or take the component for repair to extract off the information.
- 3. 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. It's important therefore to sensitize the school community/students on the right means of handling e- wastes.
- 4. You can also donate the out of use computers and other components to ICT repair shops.
- 5. Air pollution. Once thrown at the garbage pit by say lab attendant, e-waste may be burnt 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	Basis of	Expected responses
	assessment	

Competency (Basis of assessment)	Evidence: Skill/ability exhibited/Score	Score
Provides a focused introduction	Produces a focused introduction	01
Explains the consequences of continuous use of ICT	 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 laboratory. Identifies and explains <i>2-3</i> causes of insecurity in the laboratory. 	04
	 Identifies and explains 1 causes of insecurity in the laboratory. No response 	03
	• 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 	04
	-breach of privacyIdentifies and explains 4-5 measures for	03
	 the listed categories of challenges. Identifies and explains 2-3 measures for the listed categories of challenges. 	02
	 Identifies and explains 1 measure for the listed categories of challenges. 	01
	No response 11	00
Conclusion	Provides a relevant conclusion	01
Format of the presentation	A formal document	01

Assesses system security, safely uses ICTs and manages E-waste

Topic 1 d Topic 7 c Topic 8 (a-c) Topic 16 (a-b) Consequences of exposure to ICTs and the mitigation strategies

Possible Causes of the Incidents

- 1. Lack of Security Personnel: The absence of guards or responsible staff to monitor the premises at night makes it easy for thieves to break in.
- 2. **Unprotected Windows and Doors:** Weak entry points can be exploited by intruders.
- 3. **No Alarm or Surveillance System:** Without CCTV or alarms, criminal activity goes unnoticed or unrecorded.
- 4. **No Inventory Management:** Equipment might not have been tracked or labelled, making it hard to detect or trace missing items.
- 5. **Unsecured Network Server:**Sensitive data may have been stored on computers with no encryption or security protocols.
- 6. Careless Use of ICT by Users:
 Users may leave devices on or
 connected, making data more
 vulnerable to loss or theft.
- 7. **Inadequate Lighting Around the Premises:** Poor visibility at night provides cover for burglars.
- 8. **Neglect of Safety Procedures:** No security policies or procedures were in place for handling ICT tools.
- 9. **Poor Community Involvement:** The local community may not be engaged in safeguarding public resources.
- 10. **Untrained Staff:** Staff may not be trained in data protection or physical equipment handling.

Recommended Preventive Measures Physical Security Measures

- 1. Install **CCTV cameras** and ensure they are monitored regularly.
- 2. Use strong metallic doors, locks,

and window grills in ICT rooms. 3. Employ **night guards** or use community watch groups to secure the premises. 4. Ensure the **ICT lab is locked** after hours and all devices are shut down properly. 5. Install **motion sensors** or **alarm systems** to detect intrusions. Data & Information Security 6. **Encrypt important files** and use password protection on all computers. 7. Perform **regular data backups** to external drives or secure cloud platforms. 8. Use **antivirus software** and **firewalls** to prevent data breaches. 9. Assign different user accounts with access restrictions for each user. 10. Educate users on safe file storage. secure passwords, and avoiding malware. **Responsible ICT Usage** 12. Set **time limits** for ICT use to prevent overuse and digital addiction. 13. Monitor internet usage and **block** harmful or non-educational sites. 14. Educate users about cyber threats, digital responsibility, and online ethics. 15. Draft and enforce an Acceptable Use Policy (AUP).

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

Competence	Basis Of Assessment	Expected Responses
S		
T3 (a,b)	Steps/processes/proc	- Stage 1: Converting academic
T7	edures Followed to	documents from hard copy to soft copy
(a,b)	apply	Tools: scanners, scanning apps like
T11 a	online	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 ${\it CV}$ 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: creating an email Tools: PC, web browser
Application: Open a web browser like google chrome. Enter <i>gmail.com</i> in the web address Select create account. Choose the type of account (personal account)
Enter your personal information e.g. surname, first name, user name and password, confirm 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
(info@sjs.ac.ug) Compose a greeting line
Select the attach button and browse to find the files (application letter, CV and academic documents) Select send.

Competency (Basis of	Evidence: Skill/ability exhibited/Score	Score
assessment) Provides a		
focused	Produces a focused introduction	01
introduction		
Describes	Identifies 6 or more relevant steps with the	04
procedure	necessary ICT tools	
	• Identifies 4-5 relevant steps with the necessary ICT	03
	tools	
	• Identifies 2-3 relevant steps with the necessary ICT	02
	tools.	0.4
	Identifies 1 relevant step	01
	No response	00
Follows a logical	Complete logical flow.	02
flow	Partial/incomplete Logical	01
	flow No logical flow	00
Conclusion	Provides a relevant conclusion	01
	(solution/judgement/recommendation)	

Competences	Basis Of Assessment	Expected Responses
Т3	Describes	-Access a computer
a,b	relevant steps	-Downloading the form
T7		from the web
a,b		-Filling the form
T11		-Taking some photos
a		about the project
T13		-Printing the photos and
a		forms
		-Scanning the filled
		forms& photos
		-Uploading the to the
		website
	Describes ICT	- Computers
	tools used.	- camera
		- printer
		- scanner
		- flash disks
		- CDs
		- Modem
		- Mobile phones

	, I
	-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 to Follow:
steps	Steps to Follow.
зсерз	1. Scan Your National ID
	 Use a scanner or
	smartphone to take
	a clear image of the
	front and back of
	your national ID. o Save it on the
	o Save it on the computer as a .jpg
	or .pdf file with a
	clear name like
	Kizito_NationalID.p
	df.
	2. Open the Website
	o Open the browser
	and go to:
	<u>www.ndagency.go</u> <u>.ug/certificates</u>
	3. Locate the Upload
	Section
	Look for the
	instructions or
	section titled
	"Upload ID &
	Feedback " or
	Feedback" or similar.
	Feedback " or

"Choose File" or
"Browse" button.
 Select your saved
ID file from the
computer.
o Click "Upload" to
send it to the
system.
5. Fill in the Feedback
Form
o Enter your name,
email, phone
number, and
comments about
the training in the
provided form
fields.
 Ensure all required
fields are filled in
correctly.
6. Submit the Form
o After filling in the
form and uploading
the ID, click on the
"Submit" button.
7. Download the
Certificate
o Once submission is
successful, look for a "Download
Certificate" button
or link.
o Click on it to
download the
certificate to the
computer (usually
in PDF format).
o Open and verify the
certificate, then
save it on your
flash drive or email
it to yourself.