



NCDC

*NATIONAL CURRICULUM
DEVELOPMENT CENTRE*

End of Year Sample

ASSESSMENT ITEMS FOR S.1 AND S.2

ICT

2022

ICT SAMPLE ITEMS FOR END-OF-YEAR S.1 ASSESSMENTS

Guidance to the Teacher

These sample test items are intended to help ICT educators to develop end-of-year test items for Senior One and Senior Two learners. They are not complete examination papers for the subject. To determine the number of items in the paper, the teacher should consider the demand for each item on the test taker as well as the amount of time an average learner can devote to providing the response. An ICT examination at this level should ideally take not more than 2 hours. Rather than replicating the samples, the teacher should benchmark them.

The learning outcomes evaluated are listed beneath each item. This is to remind the teacher to keep the syllabus learning outcomes in mind as he/she develops the items.

Short response items

1. a) Kidole has used his computer to capture information about his business for the last six years. Of late, his computer started slowing down and hangs during use. Suggest an appropriate solution that Kidole can use to solve the problem with his computer?

- b) In a school computer laboratory, learners directly access the files of their fellow students without permission leading to data loss. Suggest appropriate measures that may be put in place to improve security of the computer files?

Learning outcomes assessed in number one

The learner should be able to:

- Describe the physical devices of a computer system and how each of them operates.
- Assemble a computer system.
- Appreciate the safety precautions for the different ICT tools.

Extended response item

2. Imagine you are at a camp site in a remote village and realise that the many features near the camp site are what was required for your Geography project. You need to take a number of photos of these features because they will be helpful in your Geography coursework. You only have access to two devices with you and an internet connection. A new digital camera that does not have a memory card in it but has internal storage that can accommodate about 5 images and a laptop whose webcam is faulty. Both the laptop and the camera support Bluetooth technology. You need to take not less than 30 photos for the coursework to be fully covered.

Explain in details how you can get all the necessary photos while using the camera, laptop, and the internet without leaving the camp site.

Learning outcomes assessed in number two

The learner should be able to:

- Use various ICT tools.
- Use computer peripheral tools.

SAMPLE MARKING GUIDE FOR S.1 ITEMS

1. Kidole has used his computer to capture information about his business for the last six years. Of late, his computer started slowing down and hangs during use. Suggest an appropriate solution that Kidole can use to solve the problem with his computer.
 - **Upgrade the computer memory to solve the possibility of running out of RAM (Random Access Memory).**
 - **Upgrade the computer's storage to resolve the possible issue of running out of disk drive space (HDD or SSD).**
 - **Install a new HDD to replace the aged or fragmented hard drive.**
 - **Restart the computer each time it hangs to kill many background programs.**

- **Reconfigure and remove all start-up programs that slow down the computer.**
- **Falling behind on Windows or driver updates.**
- **Install a strong, genuine and updated anti-malware to stop the effects of malware such as viruses.**

Criteria of Assessment of the item

1. Score (3) for 3 or more solutions.
2. Score (2) for 1-2 solutions.
3. Score (1) for any logical augments whether appropriate or not.

b) In a school computer laboratory, learners directly access the files of their fellow students without permission leading to data loss. What appropriate measure can be used to improve the security of the computer files?

- ✓ **Use strong user authentication measures such as the use of strong passwords**
- ✓ **Sensitize users on data privacy and its implications**
- ✓ **Configure the computers with user access levels and give user privileges**
- ✓ **Install strong, genuine, and updated anti-malware to stop the effects of malware such as viruses.**
- ✓ **Develop and implement a data Security Policy for computers and devices**
- ✓ **Back up Your Data all user data files on computers**
- ✓ **Encrypt Sensitive Data files to prevent unauthorized access and loss.**
- ✓ **Use Software like deep freeze to assist in the management and avoid data loss.**
- ✓ **Have and implement a Password Policy.**

Criteria of Assessment of the item

1. Score (3) for 3 or more appropriate measures.
2. Score (2) for 1-2 appropriate measures.
3. Score (1) for any logical measures whether appropriate or not.

Imagine you are at a campsite in a remote village and realise the many features near the campsite, are what was required for your Geography project. You need to take a number of photos of these features because they will be helpful in your Geography coursework. You only have access to two devices with you and an internet connection. A new digital camera that does not have a memory card in it but has internal storage that can accommodate about 5 images and a laptop whose webcam is faulty. Both the laptop and the camera support Bluetooth technology.

You need to take not less than 30 photos for the coursework to be fully covered. Explain in detail how you can get all the necessary photos while using the camera, laptop, and internet without leaving the campsite.

OUTPUT	Basis of Evaluation	CRITERIA 1 Relevance on the results of the output	CRITERIA 2 Accuracy of the response	CRITERIA 3 Coherence of the response to the task
Detailed Explanation	Written opinions and ideas	Score: 3 for 5-6 Score: 2 for 3-4 Score: 1 for 1-2 For any of the steps below <ul style="list-style-type: none"> ✓ Turn on the phone's Bluetooth and pair it with the laptop Bluetooth ✓ Take the first five photos using the camera by saving them on its internal memory space. ✓ Using Bluetooth feature on the laptop, set it to receive a file ✓ Send the files from the phone to the laptop 	Score: 3 for 5-6 Score: 2 for 3-4 Score: 1 for 1-2 For any logical steps stated in the technical (ICT) language: <ul style="list-style-type: none"> ✓ Turn on the phone's Bluetooth and pair it with the laptop Bluetooth ✓ Take the first five photos using the camera by saving them on its internal memory space. ✓ Using Bluetooth feature on the laptop, set it to receive a file ✓ Send the files from the phone to the laptop 	Score: 3 for 5-6 Score: 2 for 3-4 Score: 1 for 1-2 If an opinion applies/ engages/ deploys/uses idea in a logical flow technically. <ul style="list-style-type: none"> ✓ applies/engages/ deploys/uses appropriate structured sentences, paragraphs and captions ✓ The account is comprehensibly precise, ordered and organized. ✓ The steps in the account have a logic timeline. ✓ The step by step account is readable, clearly written and rich in vocabulary

		<ul style="list-style-type: none"> ✓ Delete the remaining copies on the phone to free space ✓ Take new pictures using the camera ✓ Repeat the procedure of sending files to the laptop from the phone through Bluetooth technology until all the required pictures have been taken and saved on the laptop. 	<ul style="list-style-type: none"> ✓ Delete the remaining copies on the phone to free space ✓ Take new pictures using the camera ✓ Repeat the procedure of sending files to the laptop from the phone through Bluetooth technology until all the required pictures have been taken and saved on the laptop. 	<p>which is clearly written</p>
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SAMPLE ITEMS TO GUIDE THE TEACHER ON END-OF-YEAR S.2 ASSESSMENTS

1. Two competing companies, A and B, produce similar products. Company A reaches out to customers using printed flyers and billboards around the community while company B has active Facebook and Twitter platforms.

Which of the two approaches would be appropriate for marketing company products in your community and why?

Learning outcome assessed in number one

The learner should be able to use online and offline platforms to search for information.

2. You were dropped in the middle of a forest. You are not able to identify where you are. In your pocket, you have a functioning smartphone that has no SIM card in it. You realise that it can access an active hot spot for an abandoned camping site nearby.

3. Write down a detailed account of the steps you would take to get yourself out of the forest and back to safety.

Learning Outcomes Assessed in Number Two

The learner should be able to:

- Use various ICT tools to share information.
- Assemble a computer system.

SAMPLE SCORING GUIDE

1. Two competing companies, A and B, produce similar products. Company A reaches out to customers using printed flyers and billboards around the community while company B has active Facebook and Twitter platforms.

(a) Which of the two approaches would be appropriate for marketing company products in your community and why?

- *Advertising using flyers and billboards is the most appropriate approach in my area because not all people are computer literate. However, this approach does not discriminate against the ICT elite and the illiterates.*
- *Flyers and billboard advertising favour all categories of people whether literate or illiterate, unlike company B which favours only the elite class.*
- *Accessing information using flyers and billboards on the side of the population does not cost anything since flyers are given to them free of charge, unlike social media information access where the audience pays to access information.*
- *Advertising using billboards makes huge and eye-catching adverts, unlike social media platforms.*
- *There is an increased frequency of consumer exposure when using flyers and billboards unlike social media platforms.*

Criteria of Assessment of the item

- a) Score (3) for 3 or more appropriate reasons for choosing any approach stated
 - b) Score (2) for 1-2 appropriate reasons for choosing an approach that may be stated or not.
 - c) Score (1) for any logical reason whether appropriate or not but related to the subject matter.
2. You were dropped in the middle of a forest. You are not able to identify where you are. In your pocket, you have a functioning smartphone that has no sim card in it. You realise that it can access an active hotspot for an abandoned camping site nearby.
 3. Write down a detailed account of the steps you would take to get yourself out of the forest back to safety?

OUTPUT	Basis of Evaluation	CRITERIA 1 Relevance on the results of the output	CRITERIA 2 Accuracy of the response	CRITERIA 3 Coherence of the response to the task
Detailed Account	Written opinions and ideas	Score: 3 for 5-6 Score: 2 for 3-4 Score: 1 for 1-2 For any of the steps below <ul style="list-style-type: none"> ✓ <i>Connect your phone to the active hotspot.</i> ✓ <i>This is meant to connect you to the internet.</i> ✓ <i>Turn on the GPS on your phone.</i> ✓ <i>Open Google maps on your phone.</i> ✓ <i>Type the name of your residence or the nearest trading centre e.g. Kyambogo University.</i> ✓ <i>Specify that you are walking on Google map.</i> ✓ <i>Tap directions and choose start.</i> ✓ <i>This facility will show you your current place and will provide directions you need to take to your desired destination.</i> 	Score: 3 for 5-6 Score: 2 for 3-4 Score: 1 for 1-2 Any logical steps stated in the technical (ICT) language: <ul style="list-style-type: none"> ✓ <i>Connect your phone to the active hotspot.</i> ✓ <i>This is meant to connect you to the internet.</i> ✓ <i>Turn on the GPS on your phone.</i> ✓ <i>Open Google maps on your phone.</i> ✓ <i>Type the name of your residence or the nearest trading centre e.g., Kyambogo University.</i> ✓ <i>Specify that you are walking on Google map.</i> ✓ <i>Tap directions and choose start.</i> ✓ <i>This facility will show you your current place and will provide directions you need to take to your desired destination.</i> 	Score: 3 for 5-6 Score: 2 for 3-4 Score: 1 for 1-2 The opinion applies/ engages/ deploys/uses ideas in a logical flow technically. <ul style="list-style-type: none"> ✓ <i>Applies/engages/ deploys/uses appropriate structured sentences, paragraphs, and captions.</i> ✓ <i>The account is comprehensibly precise, ordered, and organized.</i> ✓ <i>The steps in the account have a logic timeline.</i> ✓ <i>The step-by-step account is readable, clearly written and rich in vocabulary which is clearly written.</i>