

**INFORMATION AND COMMUNICATIONS TECHNOLOGY**  
**(ICT)**

**1. GENERAL COMMENTS**

The Chief Examiner indicated that the standard of the paper compared favourably with that of the previous years. The paper was within the scope of the syllabus and contains good items.

The Chief Examiner reported that there was an improvement in candidates' performance compared to that of the previous year.

**2. A SUMMARY OF CANDIDATES' STRENGTHS**

The Chief Examiner commended some of the candidates for being able to:

- (i) explain ICT terminologies very well demonstrating adequate knowledge of the subject;
- (ii) demonstrate appreciable knowledge of keyboard shortcut key in word processing;
- (iii) give examples of word processing applications;
- (iv) explain **cell** and **cell address** appropriately as applied in spreadsheet application;
- (v) outline the features of an active cell correctly.

**3. A SUMMARY OF CANDIDATES' WEAKNESSES**

The Chief Examiner noted that some of the candidates:

- (i) had difficulty expressing themselves in the English Language resulting in poor responses;
- (ii) could not write the ICT terminologies correctly. Examples; **Fire force** for **Firefox**, **Exprorer** for **Explorer** and **Opra** for **Opera** etc.;
- (iii) had inadequate knowledge of the e-mail concept and spreadsheet application; most of the candidates explained e-mail account **is where you save your money for future use, is a cross between telephone and e-mail box** etc.
- (iv) had very poor handwriting leading to examiners' difficulty in reading their responses.

#### 4. SUGGESTED REMEDIES

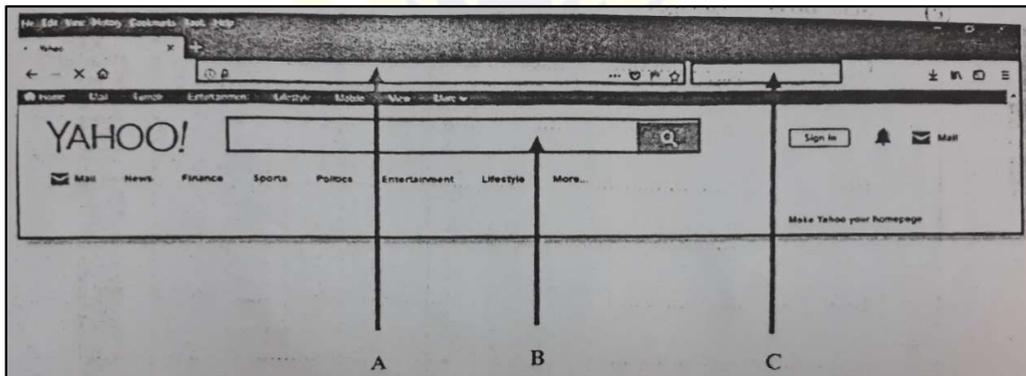
The Chief Examiner suggested the following to overcome some candidates' weaknesses:

- i. ICT teachers should spend considerable time with their students to master ICT terminologies with correct spellings;
- ii. ICT teachers should always refer to the syllabus when in doubt since all the questions come from the syllabus but some candidates deviate by giving different responses;
- iii. students should be taken through good handwriting skills;
- iv. there should be adequate practical lessons since most of the candidates' weaknesses were in the practical questions;
- v. internet and its terminologies must be treated seriously by students in class.

#### 5. DETAILED COMMENTS

##### Question 1

1. Study figure 1 carefully and use it to answer questions 1(a) to (e).



(a) Write the name of the image displayed in Figure 1.

.....

(b) List *three* types of applications similar to Figure 1 which can be used to perform the same function as Figure 1 does.

(i) .....

(ii) .....

(iii) .....

(c) Write the name of the parts labelled A, B and C as shown in Figure 1.

A: .....

B: .....

C: .....

(d) State *two* skills to be used to access information from the internet to avoid unwanted materials

(i) .....

(ii) .....

(e) State *three* advantages of using the internet in education.

- (i) .....
- (ii) .....
- (iii) .....

(a) The majority of the candidates answered this question because it was within their knowledge, but few of the candidates were not able to answer or attempt the question at all which suggests a lack of or inadequate practical ICT lessons in the schools. Most of the candidates who answered the question were giving wrong responses such as “**Yahoo Search engine**” instead of **Yahoo page or Yahoo home page**, others wrote **Google**, they spelt it **Gogel**. Some wrote **Yahoo mail page, Word Browser, Wed Browser, Brawler, Brower** etc.

The expected response should have been:

Browser/Browser Window/Search Engine/Web browser/Yahoo Home Page/Yahoo Page

(b) The majority of the candidates provided correct responses but had difficulty writing the term correctly. Some of them also provided wrong responses such as **MSN, Goggle, Exploer, Firafox, Chlome, Opra, Ping**.

The expected response should have been:

- (i) Google Chrome
- (ii) Google
- (iii) Internet Explorer
- (iv) Microsoft Edge
- (v) Mozilla Firefox
- (vi) Opera etc.

(c) Most of the candidates were able to identify the parts labelled A and B but had difficulty in the part labelled C. Those who were able to identify the labelled parts A and B had difficulty in writing them correctly and wrote:

- A: Adressbar, Addressbox, Addresspanel**
- B: Serach, Serch, Tittlebar, Adressbar**
- C: Serach, Serch, Tittlebar**

The expected response should have been:

- A. Address bar/URL bar/URL locator**
- B. Search area/Search Box/Web Search**
- C. Search using google/ search**

(d) The majority of the candidates did not seem to understand the demand of the question and hence got it wrong. A few of the candidates provided wrong responses such as “**cut and paste**”, “**enter correct e-mail address**”. Use **Pitfall, Click in the search box, Use specific keyboard**. Other responses include **security observation** when using internet.

The expected response should have been:

Skills to be used to access information from the internet include:

- (i) Topics should not be too broad
- (ii) Topics should not be too lengthy
- (iii) Type the exact keywords
- (iv) Vary the keywords
- (v) Relevant information always appears at the top of the search results etc.

(e) Apart from wrong spellings and in some cases wrong tenses, most of the candidates understood this question very well and responded accordingly.

In general, the performance of the question was very good.

**Question 2**

**(a) Explain *download* as used in the computing environment.**

.....

**(b) List *three* types of information that can be downloaded from a website**

**(i)** .....

**(ii)** .....

**(iii)** .....

**(c) State *one* advantage of copying a file from a website into an open Word processing application**

.....

**(a)** Most of the candidates scored higher marks for this question, however, few of them used the word *download* to explain itself which is unacceptable. Most candidates also provided incorrect responses such as *Transmission of data from a larger computer to a smaller computer, transferring of information from a remouse computer lacial computer, exchanging of data to remout computer to sever computer*

The expected response should have been:

To copy a document or a file from the internet/website onto a medium or another device.

**OR**

It is the transfer of information from a remote computer/device to a local computer/device.

(b) Candidates seem to find this question difficult. Although the majority of the candidates got it right, many of them were confused as to what the question demanded. Some of their wrong responses were:

- *factual information*
- *analytical information*
- *subjective information*
- *objective information*
- *twitter*
- *medical information*
- *entertainment information*
- *Dictionary*
- *Opera news*
- *Facebook*
- *vedio -pistures*
- *audeo*
- *E-books*
- *News paper*
- *WhatsApp*
- *musisc*
- *website*

The expected response should have been:

- (i) Texts / Documents
- (ii) Images / Picture
- (iii) Audio/Sound / Music
- (iv) Video
- (v) Animation etc.

Most of the candidates provided correct responses to this question but a few of them got it wrong probably because they did not understand the demand of the question. Some typical wrong responses include “*avoiding viruses*”, and “*you can store documents on your computer which you cannot do on a type writer*”*It is used to get access to the file, It is used to type a document, It is used to save a document*as an advantage of copying a file.

The expected response should have been:

- (i) The user will get the entire content of the file into the Word document.
- (ii) The user has the option to change everything in the original information from the website.
- (iii) The file is stored locally and hence can be used offline.
- (iv) It reduces the time of typing or creating a design.

Generally, the candidate’s performance in this question was good.

**Question 3**

(a) Give *two* examples of a Word processing application

- (i) .....
- (ii) .....

(b) Complete the table below:

Keyboard shortcut keys	Action performed
Ctrl+A	
Ctrl+B	
Ctrl+E	
	Italicize selected text
	Copy selected text

This is a popular question for the candidates because they have the knowledge level of the topic. However, a few of the candidates did not attempt this question. The major setback in their responses was the wrong spellings of ‘keyboard shortcuts keys’ which affected them to score very low marks and even zero in some instances.

- (a) Most of the candidates did not pay close attention to the demand of the question and listed text editors instead of word processors, they did not understand the difference. Some of their wrong response is: *Note pad, Microsoft Office/MS Office, Microsoft world, World Star, Note pad, Word pard, ward, Microsoft Ward, Excell Spreadsheet, Powrpint.*

The expected response should have been:

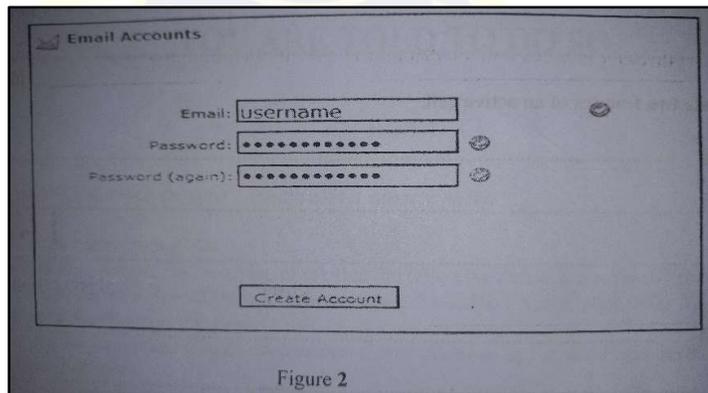
- (i) Microsoft word
  - (ii) AbiWord
  - (iii) Google Docs (online and free)
  - (iv) OpenOffice Writer etc.
- (b) Most of the candidates scored higher marks for this question. The only challenge was with ‘Ctrl+E’, in which candidates had wrong responses such as *enter, eraze* and *edit*.

The candidates’ general performance in this question was excellent.

**Question 4**

- (a) What is an *e-mail account*?.....

Use the image shown in Figure 2 to answer questions 4(b) to (d).



- (b) Write a good e-mail address to be typed at where the *username* is shown.  
.....
- (c) State why the password type appeared in dots.  
.....
- (d) Give *one* reason why the system asked for the password to be typed (again) when creating an e-mail account.  
.....

- (a) The majority of the candidates who attempted the questions did well as some were able to score all the marks allotted to the question. However, a few of the candidates performed poorly by providing incorrect responses. Most of the candidates defined e-mail instead of the e-mail account. Some of their incorrect responses are ***Email account include username, password, and email address, It is to transform messages to people, It is for messages, a device, a page, a pin, a window, a method, set of characters*** etc.

The expected response should have been:

It is an internet account used for sending and receiving messages by e-mail (electronic mail)

**OR**

It is a personal record/details that identify a user in an e-mail.

- (b) In this question, candidates understood the demand but had a problem with spacing the words forming their e-mail addresses. Although most candidates provided the correct example for an e-mail address, the majority of them got it wrong because of spacing in the writing of the username. A few of the candidates wrote e-mail addresses as ***mylinkerfly @ g.mail, agya 123 @ gmail.gom, ama amissah @gmial.com.gh***. Some also wrote [www.adobe.com](http://www.adobe.com), [www.mensah@gmail.com](mailto:www.mensah@gmail.com) ‘frank 31 (a) e-mail com’ instead of frank31@ etc.

Candidates are to note that there is no space in the username;

Example [info@waec.com](mailto:info@waec.com) and not ‘*in fo @ waec.com*’

- (c) The majority of the candidates provided correct responses to this question but a few of them had problems with the English language and hence struggled with the tenses.
- (d) Just like (c) almost all the candidates provided correct responses to this question and again a few of them had problems with the English Language and hence struggled with the tenses.

Generally, the candidates’ performance on this question was good.

**Question 5**

- (a) Explain the following terminologies as used in a Spreadsheet application**

- (i) Cel: .....
- (ii) Cell address: .....

- (b) State two features of an active cell**

- (i) .....
- (ii) .....

- (c) State the data type of the data below as used in a Spreadsheet application.**

=SUM(B6:H6) .....

This question was within the scope of the candidates but only a few of those who attempted it did well. Most of the candidates could not express their answers well resulting in scoring low marks. Just a handful of the candidates answered this question and scored high marks.

- (a) The majority of the candidates provided the correct responses to this question but many of them struggled with the spelling of keywords such as ***intersection, row*** and ***column***.

Some of their incorrect words are ***role*** instead of row and ***colon*** instead of column.

Most of them also responded incorrectly as: ***Cell is the combination of colum and role, It is the roll and colomn in a spreadsheet, row and colomn in a worksheet. Is a name of a cell, it is a columm letter and role number, the commination of role and column.***

The expected response should have been:

(i) **Cell**

A cell is an area defined by the intersection of a row and a column in a worksheet.

**OR**

It is the unit of the worksheet that can store data

(ii) **Cell address**

It is a combination of a column letter and a row number describing where a cell is located on a spreadsheet.

- (b) Most of the candidates who answered this question did not do very well. Some incorrect answers given are: ***An active cell always has A1 as default, it can be highlighted*** etc.

The expected response should have been:

Features of an active cell include:

- (i) An active cell has thickened borders
- (ii) An active cell has a Row and a Column Heading selected.
- (iii) An active cell has a name/address in the name box
- (iv) An active cell is a cell that is ready to accept data entry
- (v) An active cell can also be referred to as a cell pointer or selected cell

- (c) A greater number of candidates provided the correct response to this question. Only a few of them were confusing a function with a formula.

Candidates' performance generally was good.