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

### 1. GENERAL COMMENTS

The standard of the paper compared favourably with that of the previous years. The questions were of within the scope of the syllabus. Instructions to the questions were clear and straightforward. Spaces provided for candidates to write their responses were enough and time allotted for the paper was adequate.

There was slight improvement in the performance of candidates as compared to the previous year's.

# 2 A SUMMARY OF CANDIDATES' STRENGTHS

- (a) Majority of the candidates showed improvement in their use and spellings of ICT terms.
- (b) Most of the candidates were precise and presented their responses in short sentences demonstrating adequate knowledge in the subject matter.
- (c) Most of the candidates managed the spaces provided for writing down their answers very well.
- (d) A good number of the candidates were able to list the uses of the internet correctly.
- (e) Greater number of the candidates were able to write the names of the keyboard key characters correctly and also gave the functions of the backspace and space bar keys correctly.
- (f) Majority of the candidates were able to give examples of Word processor correctly.
- (g) Most of the candidates were able to define correctly application software, system software and folder, as well as cell, active cell and name box.

# 3 A SUMMARY OF CANDIDATES' WEAKNESSES

- i. The use of the English language and the ability to read the questions to understand its demand is a major challenge to majority of the candidates.
- ii. Most of the candidates used highlighting and selecting interchangeably to mean the same thing and therefore it was very difficult for them to come up with three differences between the two.
- iii. Almost all the candidates could not identify and name the internet browser window.

- iv. Most of the candidates could not state the two types of storage media and two ways of protecting storage media. Instead they wrote **uses and importance of storage media**.
- v. Some of the candidates did not write their correct index numbers while others did not write both their index numbers and names in the spaces provided on the answer booklet.

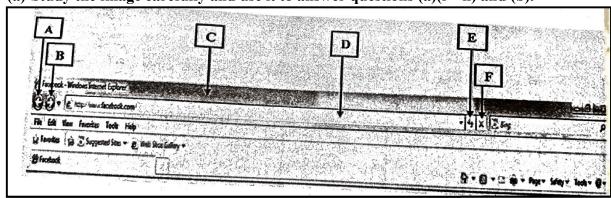
## 4. SUGGESTED REMEDIES

- (a) Teachers should be trained and re-trained through refresher courses to broaden their knowledge and understanding of the subject.
- (b) Candidates should be taught to read, understand and follow the dictates of the rubrics of the questions before answering them.
- (c) Teachers should do their best to help students learn the correct spellings of key ICT terms.
- (d) The teaching of practical ICT should be intensified in schools to equip students with the practical skills.
- (e) Teachers should endeavour to complete the teaching syllabus with students and revise with them thoroughly before they sit for the examination.
- (f) Candidates should develop the habit of solving past examination questions to familiarize themselves with the format and standard of the questions.
- (g) Supervisors and invigilators should ensure candidates provide their correct index numbers and names at the required spaces.

#### **5. DETAILED COMMENTS**

### **QUESTION 1**

(a) Study the image carefully and use it to answer questions (a)(i - ii) and (b).



	(i)	What is the name of the image shown above?
	(ii)	Name the parts of the image represented by A, B, C, D, E and F in 1(a):
		A
		B
		C
		D
		E
		F
(b)	State	the function of the parts labeled A and D in 1 (a) above:
	(i)	A:
		•••••
	(ii)	D:
(c)	List fo	our uses of the internet.

- (d) Write the names of the following computer keyboard key characters:
  - (i)

- (ii)
- (iii) {}
- (iv)

For (a) (i), most of the candidates were able to answer the question correctly except few of them who could not provide the correct name; some took a window to mean a 'browser' whiles others wrote Facebook window internet explorer.

Only few of the candidates could not identify the parts labelled in (a) (ii) on the browser window. Most of the candidates identified them correctly but had the names wrongly written as; forward arrows, back space button and cancel.

On (b), majority of the candidates were able to state the function of the back button and the address bar. However, some of the candidates wrote; it is used to delete characters when clicked on and it is where the address is typed respectively.

For (c), majority of the candidates did very well in listing four uses of the internet. However, few of the candidates messed up their responses and stated it is used for browsing. A candidate provided the following responses; Do not use the internet to steal, Do not spam, Do not write false things about others.

For question (d), most of the candidates were able to identify the computer keyboard key characters correctly but had it very difficult in writing down the names. Examples of some of their wrong spellings are: Ampasand/Ampesand, omission sign, curry braket/curly blacket, line/backward slash respectively.

# **Expected Response**

- (a) (i) Internet Explorer Window/Internet Browser Window/Web Browser Window (interface).
  - (ii)
  - A Back button/ back/previous/backward
  - **B** Forward button/forward/next
  - C Title bar
  - **D** Address bar/Location bar/URL bar
  - E Refresh button / Reload button/refresh
  - **F** Stop button/stop
- (b)
- (i) **A Back button**: It allows a user to <u>visit/go back/navigate</u> to the <u>previously</u> <u>attended/viewed webpage</u>.
- (ii) **D Address bar**: It allows a user to <u>input the address of a website</u>. It displays the <u>website address</u> of the <u>current webpage</u>.
- (c) Uses of the internet include:
  - It is used in search of information
  - It is used for communicating with one another
  - It is used for teaching and learning
  - It is used for online shopping
  - It is used for watching movies
  - It is used for playing games
  - It is used for customer support services
  - It is used for social networking etc.

(d) (i) & – Ampersand/And ^ - Caret/ Exponentiation/Circum Flex/Exponential/Exponent (ii) { } — Curly brackets/ Brackets/Braces (iii) (iv) / – Forward slash/ Slash/Division/Division sign/Division symbol In general, performance on the question was average. **QUESTION 2** (a) Give the functions of the following keyboard keys: Backspace: ..... (ii) Space bar: ..... ..... (b) (i) Outline three differences between selecting and highlighting a text in a Word processing application. ..... ...... (iii) Name two word processors.

Most of the candidates attempted this question and produced satisfactory responses. For (a), candidates answered it fairly. Some provided responses as (i);**it is used to give space in a text**, **it is used for spacing sentences** and (ii); **it is used to shift or enlarge a sentence on a computer.** 

Question (b) (i) was unfamiliar question and the candidates who attempted the question struggled a lot and could not answer it correctly. Most of the candidates who tackled the (ii) part performed extremely well. However, a few of the candidates wrote some of the examples of word processors as; **Note pard** and **ms ward**.

#### **Expected Response**

(a)

- (i) **Backspace**: It is used to <u>delete/erase</u> characters to the <u>left of the cursor/insertion point</u>.
- (ii) Space bar: It is used to create/insert a space/gap between words or characters.

(b) (i)

SELECTING	HIGHLIGHTING
1. Meant for formatting purpose	1. Laying emphasis on a point.
2. Background vanishes after formatting	2. Background stays after highlighting.
3. Temporary action	3. Permanent /Long-lasting action.
4. Not dependent on colour	4. Dependent on colour.
5. Involves one step to accomplish	5. Involves multiple steps to accomplish.

- (ii) Word processors include:
- Microsoft word
- Writer
- WordPerfect
- WordPad
- Notepad
- WordStar
- Pages
- AbiWord
- LibreOffice Writer
- IBM Lotus Word Pro
- KWord
- Nisus Writer
- GNU TeXmacs

- Atlantis Word processor
- Kingsoft Writer
- Apache Open Office Writer
- Calligra Words
- Groff
- JWPce
- KWord
- WordGraph
- AbleWord
- WriteMonkey
- FocusWriter
- Judoom
- AEditetc

Generally, candidate's performance in this question was very poor.

# **QUESTION 3**

(a)	State the two types of storage media.			
(b)	(i) Give three important features of storage media.			
	(iii) State two ways to protect storage media.			

Generally, this question was fairly answered by most of the candidates who attempted it.

For the (a) part, it was difficult for them so only few of the candidates answered it correctly. However, most of the candidates did not understand the demand of the question and gave examples of storage media instead of types of storage media whereas a lot of them gave wrong responses as; **primary storage media, secondary storage media, RAM, ROM.** 

Candidates who answered question (b) (i) gave the uses of the storage media instead of features. Almost all the candidates who attempted this question got it wrong.

On the (ii) part, majority of the candidates answered the question poorly. Most of the candidates wrote on how to protect the content of the storage media instead of protecting the storage media itself. However, few candidates gave correct answers.

#### Expected Response

- (a) The 2 types of storage media are:
  - (i) Magnetic media/magnetic
  - (ii) Optical media/optical

(b)

- (i) Important features of storage media include:
- Some of them have tracks
- They have sectors
- They have data area
- They have silver coated surfaces
- They are non-volatile/store data permanently
- Capacity reckoned in terms of bytes/megabytes/terabytes

- It has addressable units
- It is accessed sequentially or randomly
- Made of plastic material
- Data are recorded on sectors within tracks
- Each track is subdivided into sectors
- (ii) Ways to protect storage media include:
- Keeping storage media in a protective jacket
- Keeping storage media away from magnetic fields
- Write-protect storage media
- Keeping storage media away from moisture
- Keeping storage media away from dirt
- Keeping storage media in a protective case
- Keeping storage media from hot environment

Candidate's general performance in this question was below average.

#### **QUESTION 4**

what is:		
(i)	application software:	
( )		
(ii)	system software:	
()	-y	
(iii)	a folder:	
()		
	••••••	

(b) Give three examples of an operating system.

This questions was probably the most well answered question by a greater number of the candidates who attempted it.

For (a), most of the candidates were able to define application software, system software and a folder to score a good mark. On the other hand, some of the candidates defined application software as it is a software designed to entertain the user.

Most of the candidates were able to give examples of an operating system for the (b) part. Surprisingly, some of the candidates could not list the examples and made many spelling mistakes. Some of the candidates wrote; **Windows 75**, **window 8**, **window 7**, **unxi**, **Linus** and **Mark OS**.

# Expected Response

(a)

- (i) **Application software**: It is the <u>software/application/program/set of instructions</u> used to <u>perform</u> a <u>specific task</u> by the user.
- (ii) **System software**: It is the <u>software/application/program/set of instructions</u> that is used to <u>control the operation of a computer.</u>
- (iii) A folder: This is a virtual <u>place/location</u> on the computer where <u>programs</u>, <u>files</u> and other folders can be located/kept/placed/stored/organised.
- (b) Examples of operating system include:
  - Windows (XP, ME, 2000, Vista, Windows 7, Windows 8, Windows 10) etc
  - DOS
  - Mac OS
  - Solaris
  - Unix
  - Linux
  - Novell NetWare etc

General performance was above average.

#### **QUESTION 5**

(a) List three toolbars or bars in a spreadsheet application.						
(b) Define the following terms as used in spreadsheet application:						
(i)	cell:					
(ii)	active cell:					
(iii)	name box:					

This was also very popular and well answered question by most of the candidates who tackled it.

For part (a), most of the candidates were able to list toolbars or bars in a spreadsheet application. However, some of the candidates got the spelling of some of the words wrong and wrote them as; **Tittle bar**, **Formating toolbar**, **Formular bar**, **Mune bar**.

The (b) part of this question saw most of the candidates exhibiting their knowledge in the subject matter to demonstrate their understanding on the topic. Meanwhile, few of the candidates had few of the terminologies wrongly spelt as; **colomn**, **columm** and wrongly defined active cell as; **the cell that contains the recipient address or contain the work sheet, where the cursor is currently located.** Name box was also wrongly defined as; **it is the box that contains the content of the active cell.** 

#### Expected Response

- (a) Toolbars or bars in spreadsheet application include:
  - Title bar
  - Status bar
  - Menu bar
  - Formatting toolbar
  - Standard toolbar
  - Formula bar
  - Scroll bar etc.
  - (i) Cell: It is the <u>intersection</u> of <u>a row</u> and <u>a column</u> in a worksheet and which is identified by the column letter and row number.
  - (ii) Active cell: It is the <u>current cell ready to accept data</u> entry from the user. It is the <u>selected cell</u> in the <u>worksheet</u>.
  - (iii) Name box: It is the <u>part of a worksheet</u> (the box to the left of the formula bar) that <u>displays the name of the active cell</u> (the cell that is currently selected).

Performance generally was average.