



THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA



**CANDIDATES' ITEM RESPONSE ANALYSIS
REPORT ON THE CERTIFICATE OF SECONDARY
EDUCATION EXAMINATION (CSEE) 2023**

**INFORMATION AND COMPUTER
STUDIES**



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FOREWORD

The report presents Candidates' Item Response Analysis (CIRA) on Information and Computer Studies (ICS) in the Certificate of Secondary Education Examination (CSEE) conducted in November 2023. Its purpose is to provide feedback to all education stakeholders regarding the factors contributing to candidates' performances in Information and Computer Studies.

The Certificate of Secondary Education Examination (CSEE) is a summative evaluation which, among other aspects, assesses the knowledge and skills acquired by the candidates in ordinary secondary education level. This analysis provides a rationale for the candidates' performances in the Information and Computer Studies subject. The candidates who achieved high scores demonstrated sufficient proficiency in interpreting HTML codes, creating email accounts, clear comprehension of LAN network topologies, proficient application of desktop publishing (DTP) for creating publications documents, effective preparation of presentations, skillful manipulation of data within databases, and the ability to create documents using Microsoft Word Processing software. Conversely, the candidates' who attained low scores lacked sufficient understanding of video film editing procedures and incorrectly interpreted the requirements of the question.

This report will assist students in recognizing their strengths and weaknesses, thereby enabling them to enhance their learning before taking their CSEE. Furthermore, it will help teachers in identifying challenging areas and implementing appropriate measures during the teaching and learning process.

NECTA anticipates that the feedback presented in this report will prompt education stakeholders to implement necessary measures to enhance the teaching and learning of the ICS subject. As a result, students will acquire the knowledge, skills, and competencies outlined in the syllabus, leading to improved performance in future examinations.

The Council acknowledges and appreciates the contributions of all individuals involved in the preparation of this report.



Dr. Said Ally Mohamed
EXECUTIVE SECRETARY

LIST OF ABBREVIATIONS

ALU	-	Arithmetic Logic Unit
BCC	-	Blind Carbon Copy
CC	-	Carbon Copy
CIRA	-	Candidates' Item Response Analysis
CSEE	-	Certificate of Secondary Education Examination
CU	-	Control Unit
CPU	-	Central Processing Unit
DTP	-	Desktop Publisher
HTML	-	Hypertext Markup Language
LAN	-	Local Area Network
Ms.	-	Microsoft
NECTA	-	National Examination Council of Tanzania
RAM	-	Random Access Memory
ROM	-	Read Only Memory
WLAN	-	Wireless Local Area Network

1.0 INTRODUCTION

The Information and Computer Studies papers for the year 2023 were structured in accordance with the examination format derived from the 2005 syllabus for Ordinary Secondary Education in Information and Computer Studies.

The examination comprised two papers: Information and Computer Studies 1 (theory) and Information and Computer Studies 2 (practical). The theory paper was divided into three sections: A, B, and C. Section A consisted of two objective questions which are; multiple-choice question with ten items, each carrying one mark, and a matching items question containing six premises, each carrying one mark. Section B included six short-answer questions, weighing 9 marks each. All questions in sections A and B were compulsory. Section C presented three optional essay questions, of which candidates were required to answer only two. The practical paper consisted of three questions, each carrying 25 marks, and candidates were required to attempt any two questions. Analysis of paper 2 is presented in Section 3.

In 2023, a total of 3,527 candidates sat for the Information and Computer Studies examination, out of them, 3,117 (89.88%) passed and 410 (10.12%) failed. This implies that the performance of the candidates was good. In 2022, a total of 3,067 candidates sat for the examination, out of them 2,805 (91.5%) passed and 262 (8.5%) failed. This shows that in 2023 there was a decrease in performance by 1.62 per cent.

In this report, candidates' performances in each question/topic are categorized as good, average, or weak based on the percentage of candidates scored 30 per cent or more of the marks allocated for the question. Specifically, performances falling within the intervals 0 to 29%, 30% to 64%, and 65% to 100% are classified as weak, average, and good, respectively. Furthermore, the candidates' performances are visually represented in charts using red, yellow, and green colors to denote weak, average, and good performances, respectively.

The analysis is done by reviewing the candidates' written responses, identifying the mistakes made during their attempts to the questions, and examining the factors influencing their performance. Additionally, extracts from candidates' scripts are used to provide concrete examples illustrating the arguments regarding their performance. Finally, the report offers

conclusions drawn from the analysis and provides recommendations based on the findings.

2.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE PER QUESTION IN PAPER 1 (THEORY)

The marks allocated in the theory paper were as follows; in section A, the first question carries ten marks, and the second question carried six marks. In section B, each question carried nine marks. In section C, each question was assigned fifteen marks.

2.1 Question 1: Multiple Choice Items

The questions assessed the candidate in nine topics, which were *Computer Evolution, Database as Information System, The Computer, Web Development, Word Processing, Presentation, Desktop Publishing, Spreadsheet and Multimedia*. The candidates were required to choose the most correct answer from a set of five enumerated items, i.e., A, B, C, D, and E.

All 3,527 candidates attempted this question, of which only 96 scored from 0 to 2 marks, 1,287 scored from 3 to 6 marks, and 2,144 scored from 7 to 10 marks. The candidates' performance in this question was good because 97.28% scored above 2 marks as shown in Figure 1.

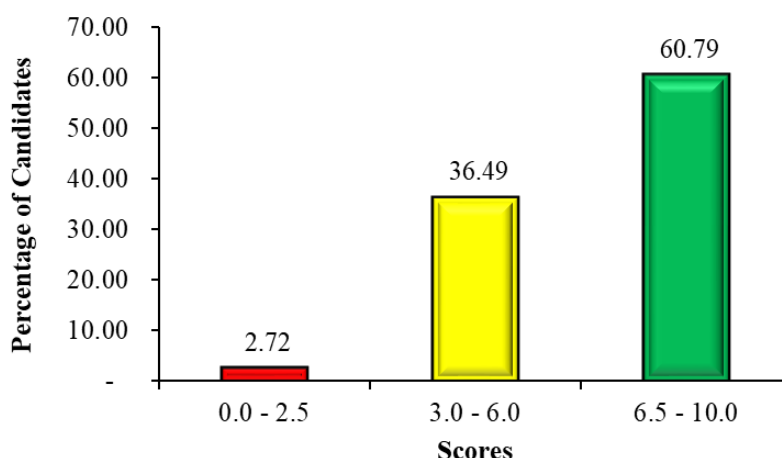




Figure 1: *The Candidates' Performance on Question 1*

The following analysis shows the candidates' responses to each item in this question:

Item (i): *What is the function of  tool as used in Microsoft Access?*

- A To create table B To create query C To create relationship
D To create report E To create form*

The item tested the candidates' knowledge on identifying function of tools used in a database. The correct answer was *C, To create relationship*. Most of the candidates attempted this item correctly. Few candidates who responded incorrectly chose other alternatives. For example, candidates who chose option A, *To create table* were wrong because the tool used to create table is . Other candidate chose B, *To create query* which is represented by the tool . Moreover, some candidates selected alternatives D, *To create Report* which allow users to customize the layout, format, and appearance of the report, including adding headers, footers, grouping data, and applying formatting options. This shows that few candidates failed to identify the tool used to create relationship in Ms.-Access.

Item (ii): *Form One students reported some school laboratory computers malfunctioning. The investigation of the reported problem revealed the failure of data transfer in the CPU. Which part caused the reported problem?*

- A ALU B CU C Memory
D RAM E ROM*

The item tested candidates' knowledge of identifying the function of components found in the CPU. The correct answer was B, *CU* which coordinates processing activities and sends signals to execute the instruction. The analysis of the candidates' responses show that some candidates selected alternative A, *ALU* which executes arithmetic and

logical operations, while alternative C, *Memory*, D, *RAM*, and E, *ROM* were also wrong because they are used to store data and instructions. This indicates that these candidates had insufficient knowledge of the functional components of the CPU.

Item (iii): *You were asked to prepare a presentation on the importance of studying the computer studies subject. What kind of software will you use to accomplish the task?*

- | | |
|------------------------------|-------------------------------|
| <i>A Microsoft Publisher</i> | <i>B Microsoft PowerPoint</i> |
| <i>C Microsoft Word</i> | <i>D Microsoft Excel</i> |
| <i>E Microsoft Access</i> | |

This item tested the candidate's knowledge of identifying the application software used to prepare presentation. The correct answer was B, *Microsoft PowerPoint*. Most of the candidates correctly chose this item. Few candidates chose alternative A, *Microsoft Publisher* which is used to create publication such as cards and certificates while alternative C, *Microsoft Word* is used to create rich text documents such as books. Some candidates chose alternative D, *Microsoft Excel*, which calculates, organizes and analyses numerical data. In addition, some candidates chose alternative E, *Microsoft Access* which is used for creating the database.

Item (iv): *How can you differentiate third computer from second computer generation?*

- A Third computer uses transistor while second computer use vacuum tube.*
- B Third computer uses vacuum tube while second computer use transistor.*
- C Third computer uses microprocessor while second computer use transistor.*
- D Third computer uses integrated circuits while second computer use transistor.*
- E Third computer uses artificial intelligence while second computer use transistor.*

This item tested the candidates' knowledge of computer evolution. The correct answer was D, *third computer uses integrated circuits while second computer use transistor* because during the second generation of computers, transistors were indeed used as a replacement for vacuum tubes, marking a

significant advancement in technology. However, it was in the third generation of computers where integrated circuits containing thousands or millions of transistors were introduced. Other alternatives were wrong because alternative B, *third computer uses vacuum tube while second computer use transistor*, C, *Third computer uses microprocessor while second computer use transistor* and E, *third computer uses artificial intelligence while second computer use transistor* were wrong because vacuum tubes used during the first generation, transistor used in the second, microprocessor used in the fourth while artificial intelligence was used in the fifth generation. This indicates that some candidates failed to identify the characteristics of computer generations.

Item (v): *A subject teacher wants to assign the position of his students using the Microsoft excel program as given in the following figure. Which function would you suggest to be used by a teacher to perform the intended task?*

	A	B	C
1	NAME	MARKS	POSITION
2	ALI	56	
3	OMAR	52	
4	KOMBO	62	
5	AMIN	80	

- A =RANK(B2, \$B\$3:\$B\$5) B =RANK (B2, B3:B5)
 C =RANK(B2, \$B\$2:\$B\$5) D =RANK (B2, \$B2:\$B5)
 E =RANK(B2, \$3\$B: \$5\$B)

This item tested the candidate's knowledge of using functions to manipulate data entered in a worksheet. The correct answer was C, =RANK(B2, \$B\$2:\$B\$5). It was noted that other candidates selected alternative A, =RANK(B2, \$B\$3:\$B\$5), which was not correct because it exclude the first student allocated in cell B2. Additionally, some candidates selected alternative B, =RANK (B2, B3:B5), which was also incorrect because the function used relative cell reference instead of a fixed cell reference. Other candidates chose alternative D, =RANK (B2, \$B2:\$B5) which was not correct because the dollar sign is missing in the row presented with number 2 and 5. Moreover, alternative E, RANK(B2, \$3\$B: \$5\$B), was also wrong because \$3\$B contradicted with the first cell B2. This indicates that the

candidates faced difficulties in identifying the correct function with proper cell reference in a spreadsheet.

Item (vi): *Sikujua designed a brochure for her ICT club members. She wants to produce 20 printouts of her work. Which one represents the correct procedures for accomplishing her goal?*

- A Click print, click file menu, select printer, type 20 copies then click print.*
- B Click file menu, select printer, click print, type 20 copies then click print.*
- C Click file menu, type 20 copies, click print, select printer and then click print.*
- D Click file menu, click print, select printer, type 20 copies then click print.*
- E Select printer, click file menu, click print, type 20 copies then click print.*

This item tested the candidate's skills in identifying the procedures for printing in desktop publishing. The correct answer was D, *Click file menu, click print, select printer, type 20 copies then click print*. All other alternatives were incorrect because the step provided does not follow the proper order of printing. For example, alternative A, *Click print, click file menu, select printer, type 20 copies then click print* started with the second step followed by the first step. In alternative B, *Click file menu, select printer, click print, type 20 copies then click print*, the second step *select printer* interchanged with the third step *click print*.

Item (vii): *You have been invited to prepare Form Four graduation songs in a digital audio file. Which one would be your initial step for the task?*

- A Digitising the analog material*
- B Setting proper recording levels*
- C Balancing the sound quality*
- D Increase higher audio beats*
- E Determining digital audio size*

This item tested the candidates' knowledge of identifying the steps of preparing digital audio files in multimedia. The correct answer was A, *Digitising the analog material*. Most candidates performed poorly on this item. It was noted that some candidates selected alternative B, *Setting proper recording levels*, C, *Balancing the sound quality*, D, *Increase higher*

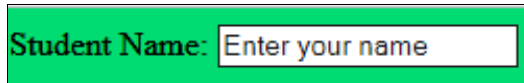
audio beats and E, *Determining digital audio size* were wrong because they are the higher stage of preparing digital audio file. This indicates that the candidates lacked knowledge about preparing digital audio files in multimedia, which led them to guess the answers.

Item (viii): *Your school secretary wants to see thumbnails of all Microsoft Power Point slides for easily rearrangement. Which type of a view would you suggest to be used to accomplish the task?*

- | | | |
|---------------------|-----------------------|------------------|
| <i>A Normal</i> | <i>B Reading</i> | <i>C Outline</i> |
| <i>D Notes page</i> | <i>E Slide sorter</i> | |

This item tested the candidates' knowledge of identifying different functions of Ms.- PowerPoint document views. The correct answer was E, *Slide sorter*. Most of the candidates attempted this question correctly. However, some of the candidates chose option B, *Reading*, the function of reading view is to provide users with a more pleasant and distraction-free reading experience, thereby enhancing comprehension and engagement with the content. It was observed that other candidates opted alternative C, *Outline*, or A, *Normal*, which were also incorrect responses because outline and Normal view are responsible for editing slides. Other candidates selected option D, *Notes page*, which enhances the presentation preparation process by providing a dedicated space for speaker notes and facilitating the creation of printed handouts.

Item (ix): *Which attribute led the display of default statement "Enter your name" appeared in the following HTML textbox?*



Student Name:

- | | | |
|------------------|-------------------|----------------|
| <i>A Value</i> | <i>B Name</i> | <i>C Input</i> |
| <i>D Default</i> | <i>E Selected</i> | |

This item tested the candidates' knowledge about the function of attribute used in HTML documents. The correct answer was A, *Value*. Other responses were incorrect because option B, *Name* defines the name of the input element for form submission and C, *Input* represents the HTML element used to create form controls. Option D, *default* is not a standard HTML attribute while option E, *selected* marks an option as pre-selected within a dropdown menu.

Item (x): *Why is it important to preview the document before printing?*

- A It minimizes the consumption of cartridges to be used.*
- B It helps to reduce typographical errors within the document.*
- C It corrects spelling and formatting mistakes made.*
- D It regulates automatically the margin of the document.*
- E It gives the assurance of the document to be printed.*

This item tested the candidate's knowledge of printing a document. The correct answer was *E, It gives the assurance of the document to be printed.* Some of the candidates selected option *B, It helps to reduce typographical errors within the document*, *C, It corrects spelling and formatting mistakes made* and *D, It regulates automatically the margin of the document* which were incorrect because they involve the formatting and editing of a document. It was also observed that some candidates opted alternative *A, It minimizes the consumption of cartridges to be used*, which was also wrong because previewing the document does not involve the cost of cartridges used in the printer.

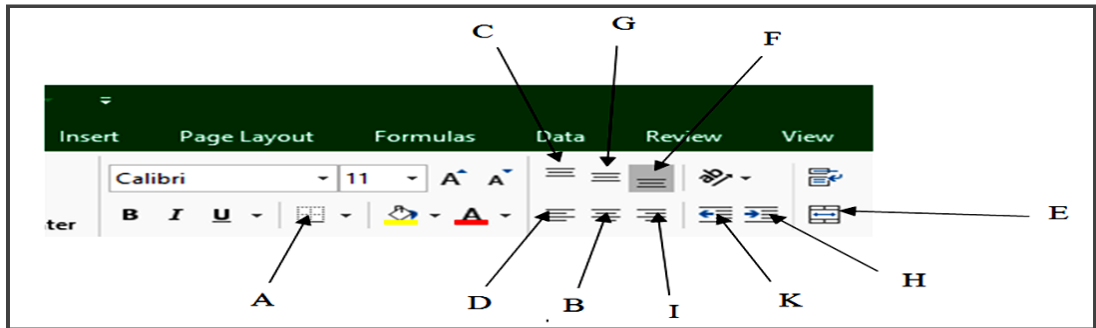
2.2 Question 2: Spreadsheet

In this question, candidates were required to match the functions of the text button alignments used in Ms.-Excel in **List A** with their corresponding alignment in **List B**. The question intended to assess the candidates' competence and knowledge of text button alignments used in Ms.- Excel

List A

- (i) It aligns the cell contents to the top edge of the cell.
- (ii) It aligns the cell contents to the right edge of the cell.
- (iii) It aligns the cell contents to the left edge of the cell.
- (iv) It centers the cell contents horizontally within the cell.
- (v) It aligns the cell contents to the bottom edge of the cell.
- (vi) It centers the cell contents vertically within the cell.

List B



All 3,527 candidates attempted this question, out of whom 529 scored from 0 to 1 mark, 997 scored from 2 to 3 marks and 2,001 scored from 4 to 6 marks out of 6 marks. This question had good performance because 85% of the candidates scored above 1 mark. The summary of the candidates' performance in this question is presented in Figure 2.

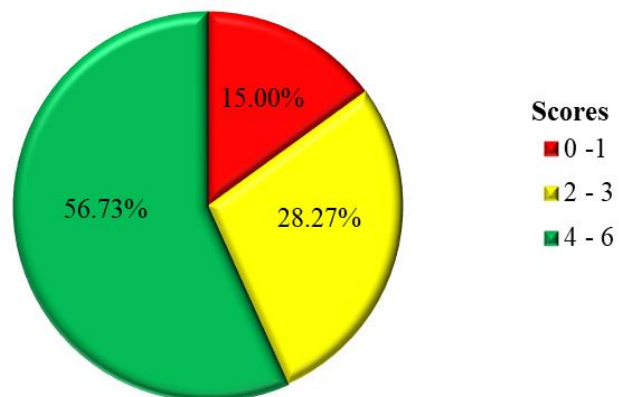


Figure 2: *The Candidates' Performance in Question 2*

The candidates' good performance in this question implied that they had sufficient knowledge of identifying the functions of text button alignments used in Ms.-Excel. However, some of the candidates who scored low marks responded correctly to some of the items. The candidates' responses to each item in this question are analyzed as follows:

Item (i); required the candidates to identify the letter that represented the text button that aligns the cell contents on top of the edge of the cell. The correct answer was *C*. However, it was observed that some of the candidates chose letter *I*, which was incorrect because it represents a button that aligns

the cell contents to the right edge of the cell. Others chose letter *D*, which aligns the cell contents to the left edge of the cell.

Item (ii); required the candidates to identify a text button alignment that aligns cell contents to the right edge of the cell. Majority of the candidates chose correct answer *right alignment* which was represented by letter *I*. However, a few candidates chose letter *H*, which represents an indent button for increasing the indent.

Item (iii); required the candidates to identify a text button alignment that aligns cell contents to the left edge of the cell. The correct answer was *left alignment*, which represented by letter *D*. It was observed that other candidates opted letter *I*, that represents the *right alignment* which was incorrect because it aligns the cell contents to the right edge of the cell. Moreover, some candidates who chose the letter *K* could not differentiate the button that decreases the indent level of the paragraph from the text button that aligns cell contents to the left edge of the cell.

Item (iv); required the candidates to identify a text button alignment that centers the cell contents horizontally within the cell. The correct answer was *horizontally alignment* which represented by letter *B*. The analysis of the candidates' responses showed that the majority of the candidates chose the correct answer. Likewise, some candidates chose letter *F*, which represents the text bottom alignment that aligns the cell contents to the bottom edge of the cell.

Item (v); required the candidates to identify a text button alignment used to align cell contents to the bottom edge of the cell. The correct answer was *bottom alignment* which is represented by the letter *F*. The analysis showed that some of the candidates chose letter *G* which was incorrect because it aligns the cell contents vertically within the cell. Furthermore, some candidates selected letter *A*, which was also incorrect because it adds or removes border from the selected cell.

Item (vi); required the candidates to identify a text button alignment used to align cell contents vertically within the cell. The correct answer was *vertically alignment* which is represented by the letter *G*. Likewise, majority of the candidates confused this item with letter *B* which centers the cell contents horizontally within the cell.

2.3 Question 3: Database as an Information System

The question consisted of five (5) parts; (a), (b), (c), (d), and (e). The question intended to assess candidates' knowledge and competence on basic database objects. The question was as follows;

What is the function of each of the given database objects?

- (a) *Form*
- (b) *Table relationship*
- (c) *Macros*
- (d) *Query*
- (e) *Report*

The statistics show that all 3,527 candidates attempted this question. Out of whom 1,185 scored from 0 to 2.5 marks, 1,391 scored from 3 to 5.5 marks and 951 scored from 6 to 9 marks. Generally, the candidates' performance in this question was good because 66.40% scored above 2.5 marks. Figure 3 presents the candidates' performance in this question.

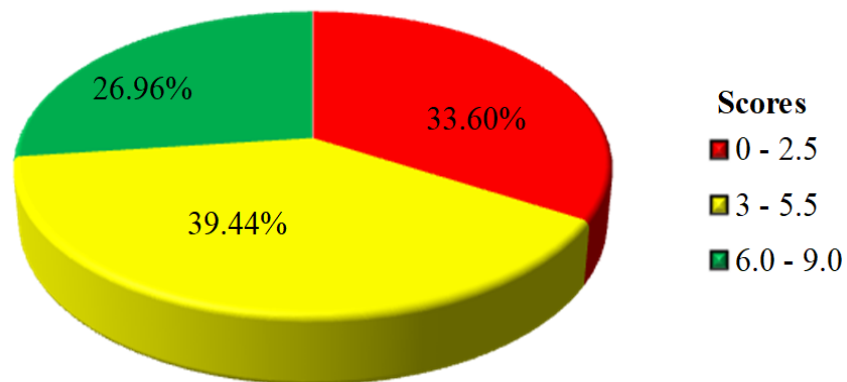


Figure 3: *The Candidates' Performance in Question 3*

The analysis of data shows that (39.44%) of the candidates scored average marks. It was observed that some of these candidates correctly explained the functions of the query and report in part (d) and (e), respectively. However, they faced difficulties in providing the functions of the form in part (a), table relationship in part (b) and macro in part (c). The analysis of the candidates' responses showed that some of them had adequate knowledge about query but others gave insufficient explanations. For example, some of the candidates explained the query as an object that searches only information from the database, while query could also update, delete and

add information in a table. In addition, some of the candidates confused the concept of the report and form. For instance, one candidate wrote, *report is a tool that allows user to enter data and edit data before printing* instead of summarizing and presenting information from a database. In part (b), a few candidates explained correctly the functions of the table relationship as used in database. However, some of them provided unclear explanations. For example; one candidate wrote, *Table relationship is the database object which used to create relationship with item* instead of tables. In part (c), majority of the candidates gave irrelevant explanations of the object macro. It was noted that some of them related it with a spreadsheet program that performs mathematical calculations.

Likewise, among the candidates (33.60%) who scored low marks, some of them correctly gave explanations about the function of query. It was also noted that, other candidates gave irrelevant explanations of the form object in part (a). For instance, one candidate wrote, *form shows the data* while other candidates wrote *form used to edit data from the files and kept it*. In part (b), some of the candidates correctly explained the function of the table relationship. However, other candidates associated the table relationship with a relationship between a table and a teacher instead of using a tool to establish a link between two tables in a database. Additionally, in part (c), some of the candidates explained the advantages of macro instead of its function while others skipped this part at all. Moreover, in part (d), some candidates related the query with specific question asked to enter data in a database instead of request for data or information from a database. Furthermore, it was observed that the majority of the candidates correctly gave the function of report in part (e). However, some of them failed to understand the content summarized in the report. For example, one of the candidates wrote; *report is used to make file which data from the table for future use instead of a report have used to generate a summary from the table and give output layout*. This indicates that these candidates lacked practical skills. Extract 3.1 presents a sample of an incorrect response from one of the candidates.

03.	(a) <u>Form</u>
	Is data that appear in the table.
	example Input type: <"text" = Name >
	(b) <u>Table relationship</u>
	Are the table that connected with two table in the database data.
	(c) <u>Macros</u>
	Are the link / data that connect table in the textbox in the database data.
	(d) <u>Query</u>
	Are the data that occur in the specific table.
	(e) <u>Report</u>
	This is the information that appear to the database table.

Extract 3.1. A sample of incorrect responses to question 3

The responses of a candidate provided in Extract 3.1 shows that the candidate had the correct idea of only table relationship in part (b). However, the responses provided by this candidate in part (a), (c), (d), and (e) were incorrect.

Furthermore, some of the candidates (26.96%) who scored high marks correctly gave the function of form in part (a), table relationship in part (b), query in part (d), and report in part (e). A few candidates confused the form feature and reported on how they are used in the database. However, some of them faced difficulties in explaining the function of Macro in part (c). It was observed that the candidates lacked knowledge about it, which led them to skip this part. Extract 3.2 presents a sample of correct responses from one of the candidates.

3 (a)	A form - helps the user of a computer to enter data in the tables in a database.
(b)	Table relationship - establishing relationship helps the user to know the type of relationship found between the tables. Example; one to one, one to many or many to many.
(c)	Macros - it helps the user to organize the database records in the write order.
(d)	Query - helps the user to obtain specific records which are needed for a certain task according to the criteria given.
(e)	Report - shows a summary or conclusion of data which is found in the tables, forms or queries. It also enables printing out of data in the tables, queries and form.

Extract 3.2: A sample of correct responses from one of the candidates to question 3

Extract 3.2 shows that the candidate responses who correctly explained the function of the database object in all parts but gave unclear explanations of the macro object.

2.4 Question 4: The Internet

The question consisted of three (3) parts; (a), (b), and (c). The question intended to assess the candidates' knowledge of internet in creating an e-mail account and its use. The question was set as follows;

You have been assigned to create an e-mail account for effective communication for your further studies.

- (a) Which program would you use to accomplish the task?
- (b) Which steps would you follow to accomplish the task?
- (c) Briefly explain the use of spam, Carbon Copy, and Blind Carbon Copy in the electronic mail.

The question was attempted by all 3,527 candidates, out of whom 2,543 scored from 0 to 2.5 marks, 668 scored from 3.0 to 5.5 marks and 316 scored from 6 to 9 marks. Generally, the majority scored below 3 marks, indicating a weak performance on this question. Figure 4 presents the candidates' performance in this question.

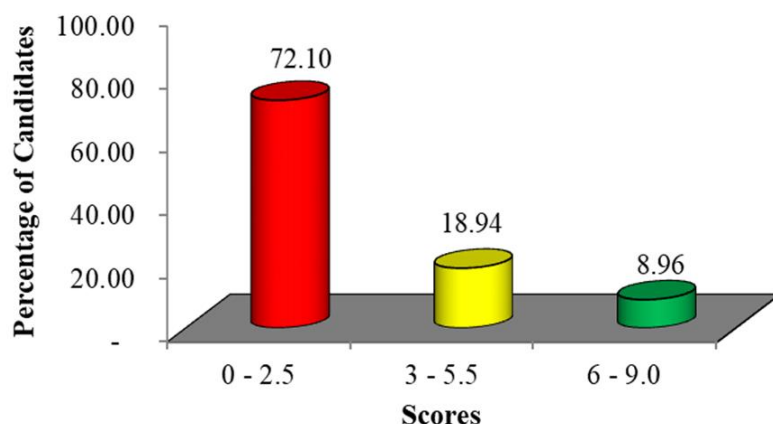


Figure 4: *The Candidates' Performance in Question 4*

Figure 4 shows that majority of the candidates' (72.10%) scored low marks. In part (a), some of these candidates identified the Web browsers such as Ms.-Edge, Google Chrome, and Mozilla Firefox as the program used to create an email account instead of email client program like Google Mail, Yahoo, and Ms.-Outlook. It was also observed that, other candidates identified application programs such as Ms.-PowerPoint, Ms.-Word, and Ms.-Publisher, while others wrote on the internet. The candidates' responses analysis showed that, some of these candidates correctly identified two to three steps of creating an email account in part (b). It was observed that some of them skipped the first step and the three last steps. A few candidates skipped the first two steps and the last step. However, some of them identified steps for creating an e-mail message instead of email account. In part (c), majority of these candidates faced difficulties in explaining the use of spam, CC, and BCC features in email. It was observed that some of the candidates understood these features as used for informing the sender when the message is delivered while others guessed the answers. For instance, some of these candidates wrote that *CC is used to share information with recipient that interferes with other recipient's address*. Others wrote *CC is an email that is used to recognize for the authorized person only*. Likewise, others referred to BCC as the feature used for copying the message and storing in to computer while others wrote *BCC it is used to display the nick name of the sender*. Moreover, some of the candidates had an idea of BCC as the Blind Carbon Copy but failed to relate with the email. For example, one candidate wrote that *BCC is used to determine blindness of person formed using an email*. This implies that the

candidates had insufficient knowledge of the use of features used in email fields. Extract 4.1.A sample of incorrect responses from one of the candidates.

4.	3. program would use is <u>Hypertext markup language (HTML)</u> .
	b. i. To open HTML program in a Computer or Smart phone.
	ii. To open the e-mail file in a Computer or Smart phone
	iii. To enter important information Example Name, Year, Date of birth etc.
	iv. To enter user name that to be easy for visibility
	v. To allow all rules and regulation for e-mail users and then allow for users.
	c. i. Spam used to create name that are visible for all users.
	ii. Carbon copy used to create copy of E-mail information.
	iii. Blind Carbon copy used to build their information in a E-mail.

Extract 4.1: A sample of incorrect responses from one of the candidates to Question 4

Extract 4.1 shows the response of the candidate who confused the HTML language used to create webpages with the e-mail client program used to create an e-mail account. However, the candidate had idea of creating e-mail but failed to organize the ideas.

Apart from the weak performance, 18.94% of the candidates scored average marks. Most of these candidates correctly identified the email client

program used to create the email in part (a). It was observed that some candidates correctly identified the steps for creating e-mail accounts in part (b). However, some of them skipped the third step of entering a phone number while others did not put the steps in a chronological order. In part (c), most candidates gave irrelevant explanations of the spam feature while others associated it with editing tools. For example, one candidate wrote, *Spam is used to remove harsh/wrong word in the email* and some of the candidates wrote *Spam is used for checking the security in the email*. It was observed that some of the candidates had an idea of carbon copy and Blind Carbon Copy features but gave unclear clarifications or interchanged their explanations.

Furthermore, some of the candidates (8.96%) who scored high marks correctly identified the program used to create an email account in part (a) and the steps required to create an email account in part (b). The analysis done on the candidate's responses showed that some of them gave the correct function of CC and BCC but faced difficulties in explaining the function of spam. Extract 4.2 presents the correct responses from one of the candidates.

4 (a)	Google mail (Gmail)
4b)	<ul style="list-style-type: none"> ✓ Open the program in the web browser ✓ Enter your full names ✓ Enter your phone number ✓ Enter / create a password ✓ Re-enter the password to verify ✓ Click create and an e-mail account will appear
4c)	<p>Spam - these are all the unwanted mails which are sent by unknown accounts to ones e-mail account.</p> <p>Carbon copy - this is where the e-mails of all other recipients apart from the main recipient are kept for the to get the copy of the mail.</p> <p>Blind Carbon Copy - this is where the e-mail addresses of the recipients who are not supposed to be seen by the rest that they have received the mail are typed.</p>

Extract 4.2. A sample of correct responses from one of the candidates to Question 4

Extract 4.2 shows the responses of a candidate who correctly identified the email client program used to create an e-mail account in part (a). The candidate also gave the correct steps of creating an e-mail account in part (b). In part (c), the candidates correctly explained the function of the spam feature but failed to give clear explanations of CC and BCC.

2.5 Question 5: Computer Handling

The question consisted of three (3) parts; (a), (b), and (c). The question intended to assess *candidates'* knowledge and competence in data backup. The question was set as follows,

The academic master created the computer backup by using a storage medium located within the same office. Suddenly the office got fire caused by electricity problem and the data were lost.

- (a) *Identify the method of backup done by the academic master.*
- (b) *Explain three benefits of the method of backup identified in 5 (a).*
- (c) *Which method of backup could be used to avoid the problem that happened? Give one reason.*

The analysis of the candidates' performance showed that out of all 3,527 candidates who attempted this question 1,869 scored from 0 to 2.5 marks, 774 scored from 3 to 5.5 marks, whereas 884 scored from 6 to 9 marks, as shown in Figure 5. Generally, this question had average performance because 47.01% of the candidates scored above 2.5 marks.

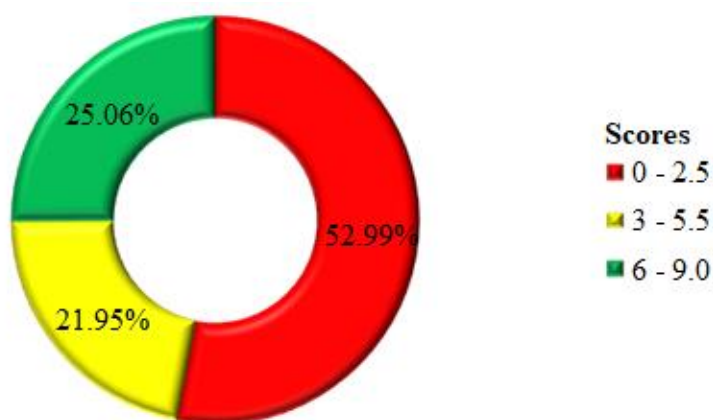


Figure 5: *The Candidates' Performances in Question 5*

Majority of the candidates (52.99%) scored low marks as shown in Figure 5. The analysis of the candidates' responses showed that some of them had ideas about backup but failed to differentiate the type of backup done via the internet from that used the storage medium in part (a). It was cloud observed that they identified the cloud backup instead of local backup, while others gave irrelevant answers such as full backup or incremental backup. The candidates' failure in identifying the appropriate backup in part (a) led to failure in identifying its advantages in part (b) and alternative backup in part (c). However, some candidates correctly identified the backup in part (a) but failed to provide its advantages in part (b). It was noted that some of these candidates gave the advantages of backup for school instead of the benefits of using local backup. In part (c), some of these candidates correctly identified the alternative backup to be used without giving a reason. Extract 5.1.A signifies a sample of incorrect response from one of the candidates.

5.	a) The method of backup done by the academic master was Data loss management.
	b) i) It stores medium located within the same area.
	ii) It manages data storage.
	iii) It requires memory
	c) Method of backup could be used to avoid the problem that happened with cloud data backup.

Extract 5.1. A sample of incorrect responses from one of the candidates to Question 5

Extract 5.1 shows the responses from a candidate who identified irrelevant type of backup in part (a). The candidates also gave the features of backup instead of advantages in part (b). However, the candidate gave the correct backup to be used in part (c).

Furthermore, some of the candidates' (25.06%), who scored high marks correctly identified the type of backup used in part (a) and its advantages in part (b). However, some of the candidates correctly gave only two benefits while others provided three reasons with unclear explanations. They also correctly identified the alternative backup to be used to avoid data loss in part (c). Conversely, some of the candidates could not provide the reason for

choosing the cloud backup in part (c). Extract 5.1 presents a sample of the correct answer from one of the candidates.

5	a) Local data backup
b)	Benefits of local much data backup
	→ It doesn't require skills / knowledge
	Local data backup is manual, not much skills / knowledge are used in this backup type compared to other method of data backup
	→ It's not expensive
	Since it's local it doesn't cost much, compared to cloud data backup which involve the use of internet hence cost much
	→ It's simple
	Not much effort / steps / procedures are done through local data backup compared to the other backup (cloud) which is complicated by many steps and procedures
c)	The type of backup to be used to avoid the problem is cloud data backup
	Reason
	→ Since cloud data backup the storage may be done online with the use of internet, in case of any problem it will be difficult for the data to be lost

Extract 5.1.A sample of the correct response from a candidate to Question 5.

Extract 5.1 shows the response of the candidate who correctly identified the method of backup used in part (a) and gave its benefits in part (b). The candidates also correctly provided another method of backup to be used in part (c).

2.6 Question 6: Multimedia

This question had two parts: (a) and (b). The question intended to assess candidates' competence in video production. The question was set as follows:

Form Six students complained that, their graduation video film had poor quality in term of order, size, color and transitions. The analysis done showed that one of the stages in preparing the video was skipped.

- Identify the skipped step.
- Explain four procedures you would follow to accomplish the skipped step?

All 3,527 candidates attempted this question, out of whom 2,718 scored from 0 to 2.5 marks, 520 scored from 3 to 5.5 marks and 289 scored from 6 to 9 marks. The general performance in this question was weak because 22.94% of the candidates scored above 2.5 marks. Figure 6 presents the candidates' performance in this question.

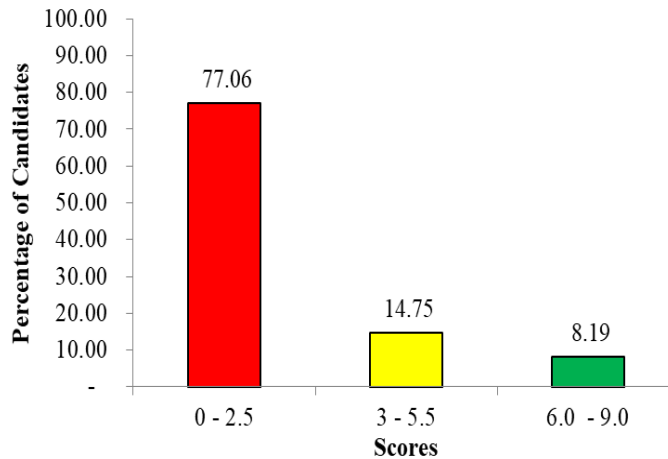


Figure 6: *The Candidates' Performance in Question 6*

Figure 6 shows that the majority of the candidates (77.06%) scored low marks. The analysis of the candidates' responses showed that most of the candidates correctly identified that the video editing step was skipped in part (a) but failed to explain its procedures in part (b). It was identified that some candidates presented the procedures for editing the compiled film. These candidates did not know that the raw video and audio files needed for the project must be collected and organized them folders by scene, shot, or category to streamline the editing process. In addition, some of the candidates failed to understand the requirement of the question as they wrote procedures for preparing a good presentation using PowerPoint software or steps for creating Ms.-PowerPoint presentation. Moreover, it was noted that other candidates gave steps for recording video or creating audio files instead of video editing. Extract 6.1 present such incorrect responses from one of the candidates.

a)	Shooting.
b)	i) Checking carefully for the tools used to accomplish the task.
	ii) Finding for the good and neat place for shooting the video.
	iii) Using different editing tools which will make the video attractive.
	iv) Shooting the video.

Extract 6.1.A sample of incorrect responses from one of the candidates to Question 6.

Extract 6.1 shows the response of the candidate who wrote the preparation for video shooting instead of steps for editing video film in part (b).

Although majority of the candidates scored low marks, 14.75% scored average marks. Some of these candidates correctly identified the skipped stage in part (a) but explained only the last two procedures of editing a video film in part (b). Most commonly explained procedures are adding text and applying visual effects such as color correction, filters, and graphics, adjustment of the brightness, contrast, saturation, and other settings to achieve the desired aesthetic. It was also noted that a few candidates outlined steps for editing video without giving clear explanations. Similarly, other candidates explained correctly some of the steps for video editing but mixed them with factors for planning video editing such as having a good quality camera. These responses indicate that the candidates lacked competence on video editing.

Moreover, a few candidates (8.19%) who scored high marks responded correctly in part (a) and provided the required procedures for editing a video film in part (b). However, some of them correctly explained the three steps of editing the video film. It was noticed that they faced difficulties in explaining the first step, which was collecting all the raw videos and audio files needed for the project. Others gave unclear explanations of their provided steps of video editing. Extract 6.2 presents a sample of such correct response from one of the candidates.

6	a) The skipped step was editing.
	b) i) Examining the film clips so as to know when and how editing can be done. This ^{also} helps to know the order or sequence of the film clips.
	ii) Removing the film clips that are in bad quality for example blurry images. This helps to provide a video with a high quality as only quality film clips are included.
	iii) Adjust the size and colour of the film clips to create a more quality video.
	iv) Using the correct transitions so as to distinguish one film clip from another.

Extract 6.2. A sample of correct responses from one of the candidates to Question 6

Extract 6.2 shows the response of the candidate who identified the skipped steps in part (a) and correctly explained part of procedure on video editing in part (b).

2.7 Question 7: Web development

The question consisted of four (4) parts; (a), (b), (c), and (d). The question aimed to assess candidates' knowledge of identifying various tags used in HTML. The question was as follows:

Study carefully the following HTML codes and answer the questions that follow:

```

<!DOCTYPE HTML PUBLIC "-//W3C// DTD HTML 4.0 Transitional// EN">-----1
<html>-----2
<body bgcolor="white">-----3
<br><br>-----4
<h2 align="center">Please! Fill Your Information Correctly</h2>-----5
<form>-----6
<table align="center">-----7
<tr>-----8
<td>Name:</td><td><input type="text" placeholder="Enter FullName" name=""></td>-----9
</tr>-----10
<tr><td colspan=2><b>Data for Information</b></td></tr>-----11
</table>-----12
<img src= "Crane.jpg" Align = "right">-----13
</form></body></html>-----14

```

- (a) Which line had the tag used for inserting picture?
- (b) What is the function of the HTML tags presented by line 6, 8 and 11?
- (c) What will happen if the tag presented by line 3 will be deleted?
- (d) If line 11 and 13 were deleted from the given codes, what will be the output?

The candidates who attempted this question were 3,527 of whom 576, scored from 0 to 2.5 marks, 1,481 scored from 3 to 5.5 marks, and 1,470 scored from 6 to 9 marks. The general performance in this question was good because 83.67% of the candidates scored above 2.5 marks. Figure 7 presents the candidates' performance in this question.

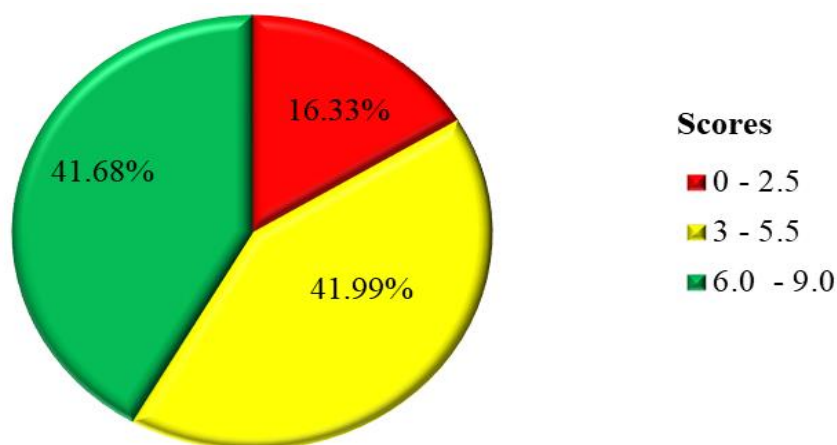


Figure 7: *The Candidates' Performance in Question 7*

The analysis of data shows that 41.99% of the candidates scored average marks as indicated by Figure 7. The majority of the candidates correctly identified the line that had a tag for inserting the image on a page in part (a). It was noted that some of the candidates identified the correct function of the tags presented in lines 6 and 8 but faced difficulties in giving the function of tags presented line 11 in part (b). The analysis of the candidates' responses showed that some of them wrote the output of the tag instead of giving its function. Others explained only the function of the bold tag but ignored the <tr> and <td> tags. In part (c), some of the candidates failed to recognize that the background color provided in the tag presented by line 3 was "white" which has no impact on the webpage when deleted. For example, some of the candidates wrote *the background color will disappear* while others wrote *the body color will not be displayed*. Moreover, in part (d), some candidates correctly drew the output, but others mixed some attributes that centers the heading and table

On the other hand, the majority of the candidate's (41.68%) who scored high marks correctly identified that line 13 `` is used for inserting a picture in a webpage in part (a). They also correctly identified the function of the <form>, <tr> and <tr><td colspan=2>Data for Information</td></tr> tags resented by lines 6, 8, and 11, respectively, in part (b). However, some of these candidates failed to give clear explanations of the tag used to bold content in *Data for Information* presented in line 11. Moreover, some of the candidates also correctly provided the effect of deleting the tag given in line 3 in part (c). In

part (d), most of the candidates correctly drew the output of the HTML codes provided. Extract 7.1 presents a sample of correct responses from one of the candidates.

7.	a) line number 13.
	b) Function of line 6 <Form> is to open the form from the body of HTML hence opening of form is through <Form>
	o Function of line 8 <tr> it is used to open the table row from the table hence the table row is opened through <tr> in HTML.
	o Function of line 11 <td colspan=2>, This is mainly used to separate the table details hence to provide another space either for picture or other details hence colspan is mainly for that purpose separating the <td> (table details).
	c) The background colour of the body will remain default or as the normal background colour of the paper (white)
	d) Output
	Please? Fill Your Information Correctly.
	Name : <input type="text" value="Enter Full Name"/>

Extract 7.1: A sample of correct responses from one of the candidates to question 7

In Extract 7.1, the candidate correctly identified the tags responsible for inserting the picture in part (a) and the functions of lines 6 and 8 in part (b) but the candidates gave unclear explanations of line 11. The candidates also gave the correct effect of deleting line 3 in part (c) and the output after deleting lines 11 and 13.

On the other hand, most of the candidates (16.33%) who scored low marks correctly identified the tag that inserts the picture on a webpage in part (a). However, some of these candidates' identified line 14 as being used for closing form, body and HTML as a tag for inserting picture instead of line 13. In part (b), most candidates described the meaning of tags presented by line 6 "<form>", line 8, "<tr>" and line 11, "<tr><td colspan=2>Data for Information</td></tr>" instead of describing their functions. Others copied the provided tags. In part (c), some of the candidates correctly described the effects of deleting line 3. In part (d), the candidates wrote

about the effect of deleting lines 11 and 13 instead of giving the output. It was also observed that other candidates skipped this part while other gave irrelevant answers. For example, some of the candidates wrote *image picture will not be displayed*. Extract 7.2 presents a sample of the candidate's incorrect responses to question 7.

7.	a. The Line that had a tag for inserting picture is Line 13
	b. The fuction of the HTML tags presented by line 6, 8 and 11
	- Line 6 - It is used When you Want to Make table in your HTML
	- Line 8 - It is used When you Want to Make inserting table row and rows
	- Line 11 - It is used to
	c. When tag presente by line 3 will be deleted the row Line in the table will be not bold.
	d. When Line 11 deleted
	and When Line 13 deleted the output Will have picture.

Extract 7.2: A sample of the candidate's incorrect responses to question 7

Extract 7.2 shows the response of the candidate who identified the HTML tag of inserting the picture in part (a) but failed to identify the functions of other HTML tags in part (b) and the intended output in parts (c) and (d).

2.8 Question 8: Computer Networks and Communication

The question consisted of two (2) parts; (a), and, (b). The question intended to assess candidates' knowledge of network topologies formed in LAN. The question was set as follows.

- (a) *A company is planning to conduct a minor LAN renovation connecting all computers and other devices to a central server.*
- (i) *Identify the type of network physical topology to be designed.*
 - (ii) *Why did the company choose the type of topology identified in 8 (a)? Give two reasons.*
- (b) *If the designed network would be modified to WLAN. What advantages will the company experience with the new design? Give two advantages.*

This question was attempted by all 3,527 candidates, whereby 1,141 scored from 0 to 2.5 marks, 1,447 scored from 3 to 5.5 marks, and 939 scored from 6 to 9 marks. This question had a good performance because 67.65% of the candidates scored above 2.5 marks. Figure 8 summarized the candidates' performances in this question.

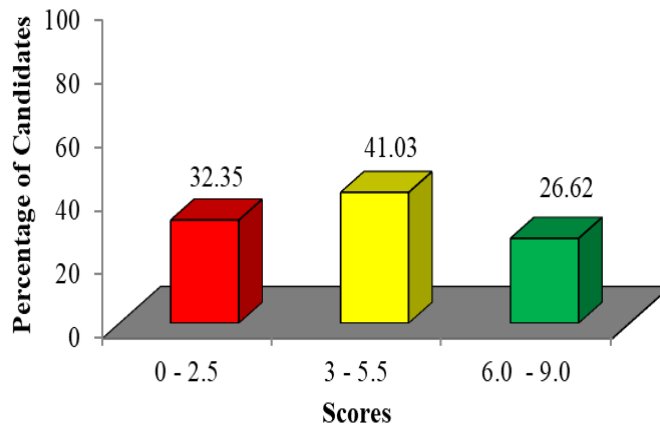


Figure 8: *The Candidates' Performances in Question 8*

Figure 8 indicates that, a significant percentage (41.03%) of candidates scored average marks. Some of these candidates correctly identified the type of network topology to be designed in part (a) (i). However, some of the candidates mixed the advantages of star topology identified and Wireless Local Area Network in part (a) (ii). For example, some of the candidates wrote, *easy to send and access the messages globally*. In addition, other candidates repeated the reasons for choosing star topology in different words. Moreover, it was observed that some of the candidates faced difficulties in identifying the network topology and its reasons in part (a) but gave the correct advantages of WLAN in part (b). However, they provided insufficient explanations because they lacked knowledge about the speed of transferring data between the LAN and WLAN.

Likewise, some of the candidates (32.35%) who scored low marks failed to understand the type of network that connects its devices to the central server in part (a) (i). Thus, they identified other topologies such as bus, ring, and mesh topology instead of star topologies. Their failure in identifying the type of topology led them to provide incorrect reasons in part (a) (ii). However, a few candidates identified the correct topology and gave only one reason for choosing the network. It was observed that some candidates gave the advantages of LAN or star topology instead of WLAN in part (b). Moreover, other candidates interpreted the WLAN as Wide Area Network instead of Wireless Local Area Network. This implies that, these candidates faced challenges on differentiating LAN and WLAN.

8	star topology
	ii) a) It can connect many users
	b) It is very fast and quickly to share information
	b) i) The network will be transfered in large area from
	iii) Reduce of expensive of buying many server

Extract 8.2: A sample of the candidate's incorrect responses to question 8

Extract 8.2 shows the response of the candidate who failed to identify types of physical topology and provides the advantages of WAN and LAN instead of star topology in part (a). However, the candidate gave only one correct advantage of WLAN design in part (b).

Moreover, among 26.62% of the candidates who scored high marks, majority of them correctly identified then the type of network topology in part (a) (i) and gave the correct reasons for choosing such network in part (a) (ii). Some of these candidates also gave the correct advantages of using WLAN in part (b). However, some candidates failed to differentiate the concept of sharing of data, transferring of data, and communication in the network communication which led them to lose some marks. Extract 8.2 presents a sample of the correct response from one of the candidates.

8a)	i) - The Network physical topology is Star topology .
	ii) - The network topology is easy to connect and install that is why the company decided to use it so as to easily connect and install.
	- It is easy to identify problem (detect the trouble shooting) because this type of topology can be easy to identify the problem that might occur that is why the company used it.
b)	i) - The information will be able to reach a large amount of people who within the local area than before when they used LAN which is reached a few number of people.

Extract 8.1: A sample of the candidate's correct responses to question 8

Extract 8.1 shows the responses from the candidate who correctly identified the type of physical topology in part (a) (i), and gave its benefits in part (a) (ii) and gave one advantage of WLAN in part (b).

2.9 Question 9: The Internet

This was an essay question which intended to assess candidates' knowledge about the application of internet in business. The question was as follows:

ESC Ltd is a company which uses the face to face way of selling its devices. The company marketing officer decided to adapt the electronic commerce to widen their business. However, he/she had limited knowledge of this approach. Explain to him/her three benefits and three limitations that the company will face by adapting the new system.

A total of 3,192 which was 90.5% of candidates attempted this question, out of which 167 scored from 0 to 4 marks, and 500 scored from 4.5 to 9.5 marks. The majority of the candidates 2,525 scored from 10 to 15 marks. The candidates' general performance in this question was good because 94.76% of the candidates scored above 4 marks. The candidates' good performance was attributed to the fact that most business activities and transactions nowadays are done electronically. Figure 9 summarizes the

candidates' performances in this question.

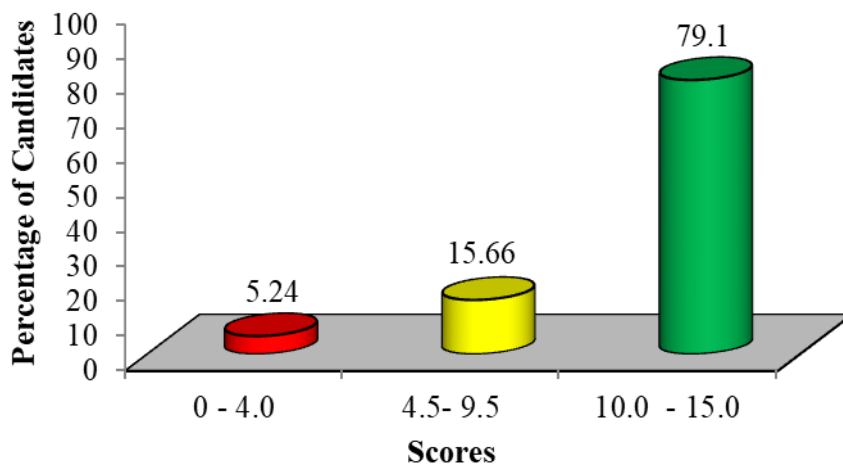


Figure 9: *The Candidates' Performances in Question 9*

Among 79.1% candidates who scored high marks, majority of them correctly explained the benefits and the limitations of adapting e-commerce in business. They also gave the correct introduction and conclusion. However, few candidates gave unclear explanations to some points while others repeated the points in their explanations. This made them fail to score full marks. In addition, it was noticed that some candidates did not provide clear introduction and conclusion. For example; one candidate wrote that *above are benefits and limitations of the electronic commerce* as the conclusion. Extract 9.1 presents a sample of correct responses from one of the candidates.

9.)	<p>Electronic Commerce also known as e-commerce refers the process of conducting business activities such as buying and selling goods and services through the use of electronic devices like computers and phones connected to the internet. Through e-commerce the internet acts as a marketplace in which businesses can sell their goods and services without requiring a physical shop. The following are three benefits of electronic Commerce.</p> <p>It facilitates faster buying and selling. One of the benefits of electronic commerce is that it facilitates faster buying and selling of goods and services. This is because through e-commerce customers no longer need to travel long distances to buy goods but rather such customers can access and buy such goods or services online at their homes and hence this facilitates faster buying and selling of goods and services.</p> <p>It promotes all-day 24/7 selling. This is one of the benefits of electronic commerce because through e-commerce a business is able to sell its products throughout all hours of the day. This is because businesses that are found and operate over the internet do not need to have specific closing and opening times and hence business activities such as selling can take place throughout the whole day.</p> <p>It can be accessed by anyone connected to the internet. This is another benefit of electronic commerce where by the products sold by the business can be accessed by any person who is connected to the internet. This means that a business can reach a wide range of customers in different places as long as the customers are connected to the internet.</p> <p>The following are three limitations of electronic Commerce.</p> <p>It is subjected to internet connectivity problems. One of the problems facing electronic commerce is that it is affected by internet connectivity problems. This is because a customer with a poor internet connection will not be able to access any products offered by the business properly and hence the business can lose its customers.</p> <p>It can not be accessed by people not connected to the internet. This is another limitation facing electronic commerce because the business can not be reached by people who are not connected to the internet. This means that the people without the proper electronic device such as computers and phones and also people who live in areas without any internet connection can not access the businesses site and hence the business can lose some customers.</p>
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Extract 9.1: A sample of the candidate's correct responses to question 9

The response of a candidate provided in Extract 9.1 shows that the

candidate correctly explained the three benefits and three limitations of e-commerce.

On the other hand, among 15.66% of the candidates who scored average marks, some of them correctly explained the benefits of adapting e-commerce in business but faced difficulties in explaining its limitations. It was noted that some candidates outlined the benefits and limitations of ecommerce without giving exhaustive explanations. However, some of them failed to give clear introduction, explanations, and conclusions.

Moreover, among 5.24% of the candidates who scored low marks, only a portion of them gave only the introduction with one or two advantages of using ecommerce. The analysis of the candidates' responses showed that others repeated the advantages in different words. For example, one candidate wrote that, *it saves time* and *it is very fast* as two different benefits of adapting e-commerce. Other candidates wrote, *it is expensive* and *it has high costs* as two different limitations. It was also noted that, some of these candidates did not understand the demand of the question by explained the advantages and limitations of the face to face selling system instead of e-commerce. This indicates that these candidates failed to understand the requirement of the question. Extract 9.2 presents such incorrect responses from one of the candidates.

9.)	Electronic electronic commerce is the process of buying and selling goods through the online way. the following are the three benefits of that face the company.
	they must ^{can} use many money through that way of making the commerce. because it is use the mega bytes through their way you can not see that a person that you want to selling your devices you can't it take more time.
	the following are the three limitation of that face the company.
	you can't see your customer.
	you can't sell a high devices.
	you can't increase your prices.
	people must escaping the commerce.

Extract 9.2: A sample of the candidate's correct responses to question 9

Extract 9.2 shows the response from a candidate who had an idea of

ecommerce but gave the irrelevant limitations of e commerce.

2.10 Question 10: Desktop Publishing

This was also an essay question intended to assess candidates' knowledge about the application of desktop publishing. The question was as follows;

A school management asked you to design a certificate for the best oral presenter award in the final year projects presentation session. In accomplishing the task, you decided to use the Microsoft Desktop Publisher program. Why have you decided to use such a program? Explain by giving five points.

This question was attempted by 2,517 candidates, which accounted for approximately 71.36% of all candidates. Out of these, 592 scored between 0 and 4 marks. The candidates who scored from 4.5 to 9.5 were 1,186, while 739 scored from 10 to 15 marks. The candidates' general performance was good because 76.48 % scored above 4 marks. Figure 10 summarises the candidates' performance in this question.

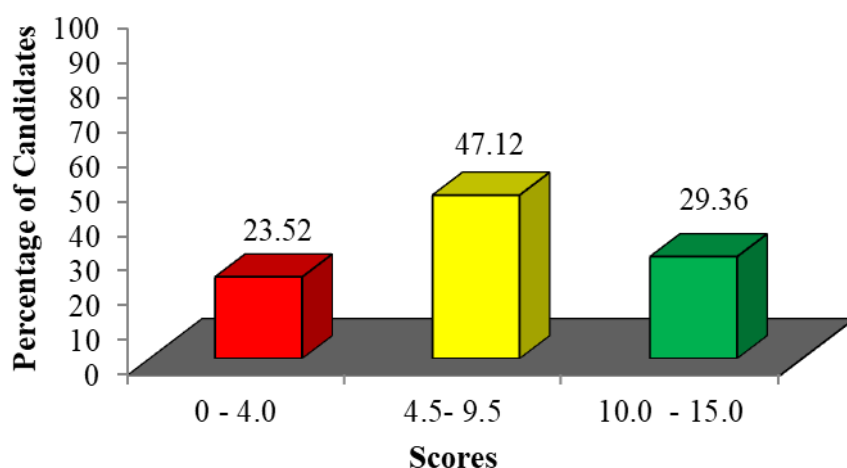


Figure 10: *The Candidates' Performance in Question 10*

Figure 10 shows, within 47.12% of the candidates who scored average marks, majority of them provided two or three reasons of using Ms.-Publisher in designing a certificate. However, some candidates mixed the uses of Ms.-Publisher and other application software such as Ms.-Word while others gave the advantages of using electronic devices. For example, one of the candidates wrote *it has high storage capacity*. Further analysis

showed that some candidates outlined the reasons but faced difficulties in explaining them.

Likewise, among 29.36 candidates who scored high marks, come of them correctly explained the reasons of using Ms.-Publisher in creating a certificate. They also gave the relevant introduction and conclusion. However, some of them explained only four reasons, while others gave the general functions of desktop publish software in their introduction instead of its importance in creating an attractive certificate. For example; one candidate wrote, *Desktop publishing program is the program used to view, edit, create, format and rename a document.* Extract 10.1 shows a sample of correct response from one of the candidates.

100	<p>A desktop publishing software is a specialised program used for creating various types of publications. Publications such as; newsletters, calendars, cards, posters and brochures. Examples of desktop publishing software include microsoft publisher, page maker, adobe indesign, quark xpress and adobe page maker. These various desktop publishing software provide a user with tools required to make a professional publication. The following are five reasons for using a desktop publishing software, to make a publication.</p> <p>It has a master page which can determine the layout of other pages. One of the reasons to use microsoft desktop publisher program in designing and creating a publication such as a certificate is because it has a master page which can be used to set a common layout to some of the other pages of a publication.</p> <p>It has a wide range of pre-defined templates to use. Among the reasons to use microsoft desktop publisher program in designing or creating a publication is that it has a wide range of in-built templates that are ready to use. Such templates are very useful as they simplify the work of a user in creating a publication like a calendar or certificate.</p> <p>It can have multiple frames in a page which can be edited independently. Another reason as to why the microsoft desktop publisher program can be used to make a publication is because a single page in the desktop publisher can have multiple frames which contain different content and each frame can be edited and formatted independently.</p> <p>A story can be contained in a single frame or threaded between multiple frames. This is one of the reasons of using microsoft desktop publisher to create a publication because it allows a story or content to be contained in a single frame or the story or content can be threaded and separated in different frames in one or more pages of the publication.</p>
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	It has a wide range of tools and editing features. This is another reason as to why the microsoft desktop publisher can be used to design a publication such as a certificate. This is because the microsoft desktop publisher has a wide range of special tools and editing and formatting features that allow a user to fully customize a publication and make a publication of professional quality.
	In summary, there are various reasons to use the microsoft desktop publisher program to create and design a publication such as a certificate because it is specialized in creating professional publications unlike other software programs like word processors like microsoft word.

Extract 10.1: A sample of the candidate's correct responses to question 10

Extract 10.1 shows the response of the candidate who correctly explained the reasons for choosing Ms.-Publisher and gave the relevant introduction and conclusion.

From the of data analysis, among 23.52% candidate candidates who scored low marks, majority of them explained the advantages of using presentation software instead of desktop publisher program. It was also noticed that some of the candidates had an idea of the publishing program but failed to follow an essay writing format, which led them to list the reasons without giving explanations. Other candidates described the general advantages of using Ms.-Publisher instead of its role in creating a certificate. For example, one candidate wrote that *it creates employment and also is the source of income*. This implies that, these candidates had insufficient knowledge of using Ms.-Publisher while others failed to understand the requirements of the question. Extract 10.2 presents such incorrect responses from one of the candidates.

10	<p>Presentation is an application software that enable the use of computer to write things and present it by combining their different requirements for the purpose of learning, teaching or explaining of something. This application is done through application software known as publisher.</p> <p>The following were advantages of using Publisher.</p> <p>It has many templates that make the presentation look with a good quality. When the one using this program may use different templates to increase quality of presentation.</p> <p>It enables a person to save the work many times compare to manual. Through publisher you may save your work many times as you likes than that of manual.</p> <p>It is reliable since it has data backup. Through this program data can backup when losted since the data may be served electronically through internet so that data can be easily up-dated.</p> <p>It is so faster compare to manual presentation. since it uses computer it is too faster than that of manual because it have been using a key board and mouse for inputting information.</p> <p>It has proofreading which enable to detect syntax and grammatical error. This has no error since there is proofreading determining errors during presentation so it make presentation to be done accurately to the user.</p> <p>Therefore, this application should be more improved so that faster works which are manual done so that to ensure the time is not more wasted since science and technology had improved more.</p>
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Extract 10.2: A sample of the candidate's incorrect responses to question 10

Extract 10.2 shows a sample of the responses from one of the candidates who explained features of electronic presentation compared to manual presentation contrary to the question demand.

2.11 Question 11: Presentation

This question also acquired the form of an essay that which required the candidates to analyze four factors that were attributed to ineffective communication. The question was as follows;

The director of the Computer Supplier Company Ltd conducted the press conference to inform the customers about proper ways of handling electronic devices. After the conference, most of the customers complained that the communication done was not effective. Analyze four factors that attributed to the reported problem.

This question was attempted by 1,345 candidates, accounting for only 38.13% of all candidates. Among them, 377 scored between 0 and 4 marks, while 398 scored between 4.5 and 9.5 marks. Data analysis shows that 1,915 scored 10 to 15 marks out of 15 marks allocated for this question. The candidates' general performance in this question was good because 71.97% of the candidates scored above 4 marks. Figure 11 shows the summary of candidates' performance in this question.

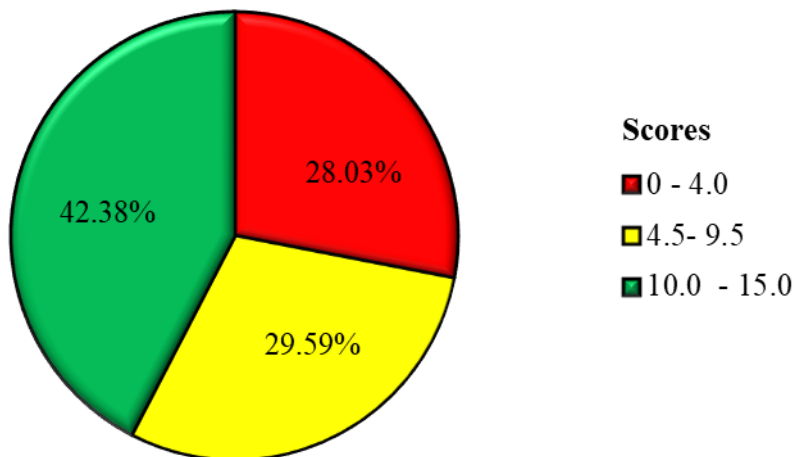


Figure 11: *The Candidates' Performance in Question 11*

The analysis of the data shows that the majority of candidates (71.97%) scored high marks, whereas only (10.78%) correctly analyzed the factors contributing to ineffective communication. However, some candidates failed to understand the basic concept that should be included in their introduction. It was noted that some candidates explained the concept of electronic devices in their introduction while others defined computer handling instead of effective communication. Other candidates defined the content to be presented by the director of the company. In addition, some candidates did not provide clear conclusion while others gave unclear explanations for some of their factors provided. Extract 11.1 signify a sample of the correct response from one of the candidates.

11.	<p>Presentation refers to the situation of conveying messages or information to the audience. There are two types of presentation which are ed electronic presentation which involves the use of electronic devices and non-electronic presentation which does not involve the use of electronic devices. The good presentation should some ^{consider} qualifies ^{if does not considered} leads to the problem such ^{if that customer} or leads to misunderstanding. The following are the qualities of good presentation.</p> <p>Language use with voice projection and tone. The good presentation should use the suitable language according to the audience. May be the director of that company use the language that the customer did not understand and leaves them high way. So that the language use associated with the good voice projection and tone used by the presenter so that to be understood by the audience for him/her to deliver the message to audience.</p> <p>Proximity. Refers to the situation in which a presenter making a condition for the audience to ask question for the place that they did not understand. So that, may be the director did not maintaining the good proximity for his/her audience to ask some question that they did not understand that's why the customer complained that the communication was not effective. Therefore proximity is important in good presentation.</p> <p>Mode of delivery. Refers to the way or method in which a presenter can convey the message to the audience. Good method of delivery makes the audience to understand the topic. So that, may be director did not use the suitable mode of delivery when he/she presenting to the customer. That's why the customer did not understand what was talked about.</p> <p>Facial expression and posture. This one mainly talking about the presenter. The presenter should a good facial expression according to the topic. As for director should have smiling on his/her face so that the customer should be able to the listen for what he/she saying. And for posture, a presenter should maintaining the position of him/her to stand when presenting so as the all audience should see him/her clearly and to listen what he/she saying.</p> <p>Generally, before presenting the work to the audience, there are some of things that the one who presenting (presenter) should follow for good presentation such as message, content, making rehearsal and audience. The presenter should understanding what kind of audience is he/she going to present his/her work so as for him/her to choose a good language to be spoken in front of audience.</p>
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Extract 11.1: A sample of the candidates' correct responses to question 11

Extract 11.1 shows the responses from the candidate who correctly analyzed the factors hindering effective communication, and provide a relevant introduction and conclusion.

Furthermore, most candidates (29.59%) who scored average marks correctly identified the factors contributing to ineffective communication but failed to provide exhaustive explanations. For example, one candidate wrote, *language used is the tool of communication for presenter, poor presentation done by the company was not able to cover all customers, level of knowledge for director was not much higher for education, time for presentation was too long as it starts from morning*. They also gave unclear introduction as well as conclusion. This indicates that, the candidates had insufficient knowledge about effective presentation.

Moreover, some of the candidates (28.03%) who scored low marks analyzed factors that affect computer performance instead of factors contributing to ineffective communication. It was observed that these candidates explained factors such as temperature, humidity, liquid, and dust. Additionally, other candidates focused on outlining the steps in preparing a presentation instead of addressing factors contributing to ineffective communication. Further analysis revealed that some candidates emphasized the importance of electronic devices, particularly computers. For example; one candidate wrote, *have high speed, and have high storage and accuracy*. This indicates that, the candidates did not understand the requirement of the question. However, a few candidates gave only one factor contributed to ineffective communication. Extract 11.2 presents a sample of incorrect information responses provided by one of the candidates.

11.	<p>Communication; Is the system of spread or transfer the information from one person to another. There are tools are used in communication - example computer and mobile phones. The following are the factors that attributed the reports problem as following;</p> <p>Installing Anti-Virus; Is the program that offer an executable file. This is meaning of Anti-virus when putting the Anti-virus it help to prevent data.</p> <p>Updating software; Software is the program used to control the operation in the computer.</p> <p>Avoid sharing password; the factor of avoid sharing password it help to prevent communication and data loss in the computer.</p> <p>Avoiding downloading free games; This process is avoid the virus entered in the data or information.</p>
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Extract 11.2: A sample of the candidate's correct responses to question 11

Extract 11.2 displays the response of a candidate who discussed methods for protecting data stored in a computer, rather than addressing obstacles to effective communication.

3.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE PER QUESTION IN PAPER 2 (PRACTICAL)

The practical paper had three questions which were derived from the topic of Desktop Publishing, Database and Word Processing. Each question carried 25 marks and the candidates' were required to attempt any two questions.

3.1 Question 1: Desktop Publishing

This question tested the candidates' skills in using the Ms.-Publisher program in designing a newsletter. The question is read as follows;

Tanzania National Park Authority plans to create online newsletter for Local and International tourists. You have been asked to assist the institution to accomplish the intended goal.

- (a) Use Microsoft publisher program to design the following page.



HINT: Use pictures found in the ICS picture and sample picture folders.

Page descriptions:

- The page layout should be A4 (portrait).
- The background colour of the page should be Gradient colours; colour 1: Pantone^R 158 C -161 C and colour 2: green.
- The background colour of the title "TANAPA" should be Gradient colours; colour 1: green and colour 2: blue while the font face should be Impact, font size 100 and white font colour.
- The text "Tours" should be designed by using Word Art style with font type aerial Black, font colour light blue and border/line colour should be blue.
- The background picture of the text "Guide" should be Desert and the font face should be Broadway with font size 48 and green font colour.

- The weight and colour of the horizontal line should be 10 and light blue respectively.
 - The font type of the statement “Welcome to Tanzania...” should be Bauhaus with blue font colour.
 - The font type, size and colour of the statement “Sadani Beach view Resort...” should be Times New Roman, 18 and font blue respectively.
 - The font type and size of word Inside should be Brush Script MT and 36 respectively.
 - The font type and size of the texts under the word Inside should be Calisto MT and 22 respectively.
- (b) Insert three blank pages; pag. 2, 3 and 4. Name them as The Kilimanjaro Adventures, Serengeti Safaris and Ngorongoro Crater respectively.
- (c) Insert the welcoming title for each page. All pages should have the background picture which reflects its title.
- (d) Create the hyperlinks in the list 1, 2 and 3 given in the home page which opens their respective pages created in 1 (b).
- (e) Save the document as Tanapa Tour Guide.
- (f) Print your works.

The candidates who attempted this question were 1,910, which is almost 54.15%, whereby 392 scored 0 to 7 marks 892 scored from 7.5 to 16 marks and 626 scored from 16.5 to 25 marks. The candidates’ general performance was good because the most candidates (79.48%) scored above 7 marks.

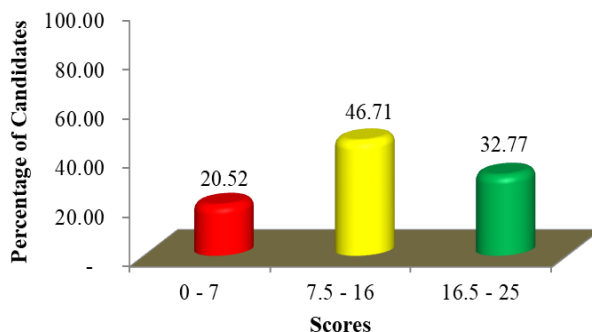


Figure 12: The Candidates’ Performance in Question 1 of Paper 2

Among the candidates who scored average scores (46.71%), majority of marks correctly inserted the word TANAPA and TOURS using WordArt style in part (a). However, some of these candidates faced difficulties in formatting the inserted words with the required font type, font color and border colour. Other candidates inserted the word “Tours” using textbox instead of using the WordArt style. It was noted that some of them inserted the background color without using the gradient property, which led failure in inserting various colors in a single frame. Furthermore, these candidates inserted the new blank pages with required properties (background picture and title), and applied the required font style in part (b), and saved the publication using the required file name (TanapaTourGuide). In addition, in part (d), a few candidates correctly created hyperlink, whereas others manually changed the color of the link text to blue. This indicates that the candidates’ lacked skills in using the advanced features of Ms.-Publisher.

On the other hand, among the candidates who scored high marks (32.77%), most of them correctly designed the provided newsletter. These candidates set the page orientation in portrait with page size (A4), inserted background color in gradient style, inserted WordArt words with its properties (border and filled color), added text boxes, and changed font face, font color and font size of some texts. The candidates’ also inserted pictures, blank pages, renamed the added pages and they linked the background picture to their first page (new page) within the same publication. This indicates that candidates had sufficient knowledge to design a newsletter using Ms.-Publisher program and its features. However, some of the candidates inserted the horizontal line but failed to apply its properties line weight size 10 and light blue color. Other candidates failed to set the text *Guide* behind WordArt *Tours*. This indicates that the candidates had sufficient knowledge about Ms.-Publisher program. Extract 12.1 presents a sample of the correct responses from one of the candidates.

TANAPA

**Welcome to Tanzania. See mount
Kilimanjaro**



*Sadani beach view Resort,
the amphibians server*



*Kitulo National
Park, God made
Garden*



*Lake Manyara,
Take part in the
Flamingos' Dance*



*Udzungwa;
Hear the bsby's
Call in the wild*

Tours Guide



Inside

1. Kilimanjaro Adventure pg 2
2. Serengeti Safaris pg 3
3. Ngorongoro Creators pg 4
4. Udzungwa Eastern gorge
5. Natural Garden Kitulo
6. Selous The Giants - Elephant greerings

Serengeti Safaris



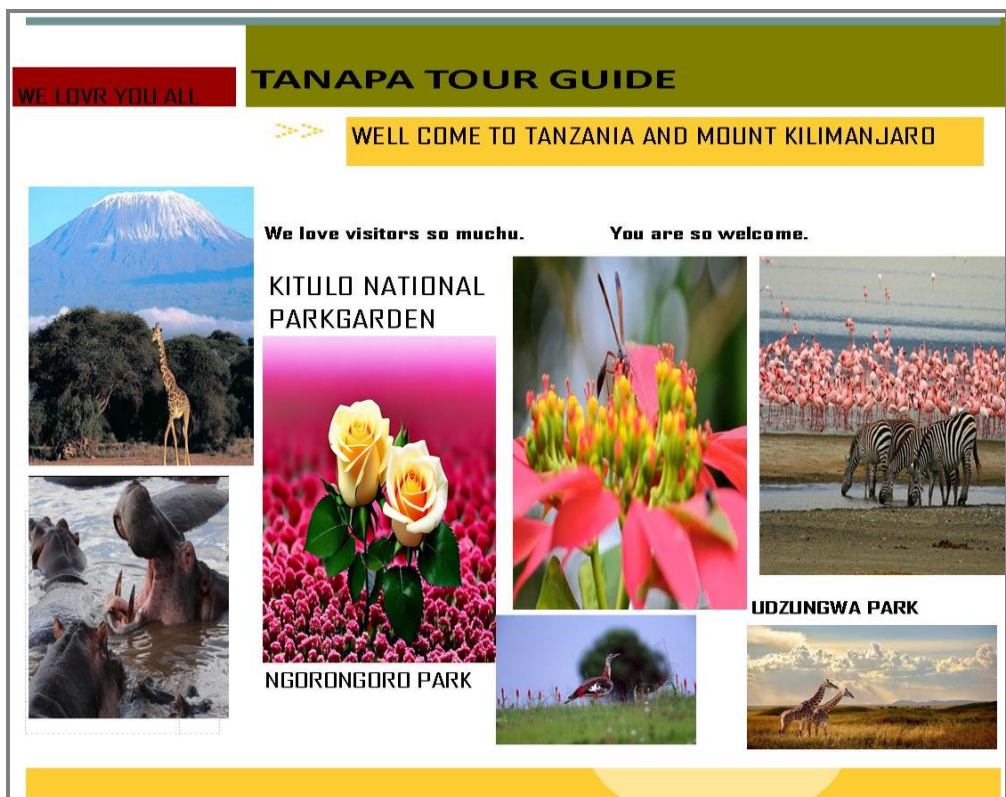
Pg 3



Extract 12.1: A sample of the candidate's correct responses to question 1 of paper 2

Extract 12.1 shows a sample of responses from a candidate who correctly performed the necessary formatting such as changing background colors, text, inserting images from folders, using shapes like textboxes, lines and rectangles. The candidate also mixed color using gradient feature, inserted pictures, blank pages, renamed added pages, and inserted the hyperlinks into pages.

Moreover, among candidates who scored low marks (20.52%), some of them used incorrect programs to design certificates. The candidates' responses analysis showed that candidates used Ms.-Word to create the certificate instead of Ms. Publisher. Others used Notepad to generate html codes that created the certificate provided. However, some of the candidates used appropriate software but failed to insert the Kilimanjaro Adventures, Serengeti Safaris, and Ngorongoro Crater blank pages and create hyperlink according to the required features. It was observed that others created blank pages but failed to insert a picture in their background. Others failed to organize the pictures and pages as required. Extract 12.2 presents incorrect responses from one of the candidates.



Extract 12.2: A sample of incorrect responses to question 1 and paper 2

Extract 12.2 shows the candidate who inserted pictures and text on a given page without following the instructions provided. The candidates also failed to create a blank page with intended hyperlinks.

3.2 Question 2: Database Management System (DBMS)

This question required the candidates to demonstrate skills in manipulation of data in the database. The question given to the candidate was set as follows:

Kushaba Technology Electronics Ltd wants to computerize her operations in order to enhance service delivery. You are required to use Microsoft access to:

- (a) *Create a database called MODERN which consists of two related tables namely **Clients** and **Products**. Assign the appropriate data type for each field. Use the following fields to create tables:*

Client

Client ID
Client_Name
Postal_Address
Location
Phone_Number

Products

Product ID
Product Description
Unit Price
Quantity
Client ID

- (b) *Set the Client ID and Product ID as the primary keys.*
(c) *Create a relationship between Client and Products table.*
(d) *Use the Form Wizard to create columnar forms for each table. Save the forms as Client Entry and Product sentry.*
(e) *Use the Client Entry and Product sentry forms to enter the following records in the tables.*

Client table

ClientID	Client_Name	Postal_Address	Location	Phone_Number
KSB004	Emily	190	Dar es Salaam	0754002233
KSB001	Stephen	30	Morogoro	0782445566
KSB026	Ally	79	Dar es Salaam	0655889911
KSB120	Mwalinu	354	Mbeya	0754666666
KSB009	Magoli	650	Mwanza	0782123456

Product table

CategoryID	Product_Description	Unit_Price	Quantity	ClientID
TV007	21 LG TV	400,000	20	KSB004
DVD001	Samsung DVD player	300,000	12	KSB001
TV006	14 Toshiba TV	200,000	30	KSB026
COMP200	Apple 120GB	1,000,000	8	KSB120
TV009	14 ZEC TV	150,000	10	KSB009

- (f) Validate the Unit_Price field in the Product table so that the field should accept the price which is less than 1,200,000, otherwise a field should give an alert message “Wrong Price Entered!”
- (g) Create a query that displays the ClientID, Client_Name, Location, Product_Description, quantity, Unit_price and calculated field Amount. (HINT: Amount is the product of quantity and Unit_price). Save the query as Calculatedquery.
- (h) Print your document.

A total of 2,738 (77.63%) of the candidates attempted this question, of whom 160 scored from 0 to 7 marks and while 691 scored from 7.5 to 16 marks. Majority of the candidates 1,887 scored from 16.5 to 25, which indicates that this question had good performance. This question had good performance because 94.16% of the candidates scored above 7 marks. Figure 13 illustrates the candidates’ performance in this question.

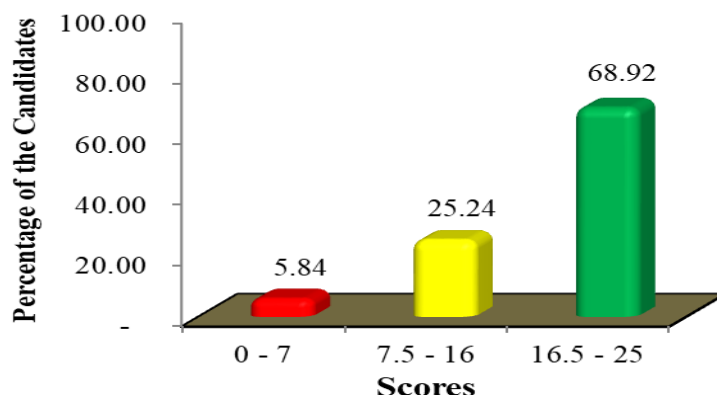


Figure 13: The Candidates’ Performance in Question 2 of Paper 2

Figure 13 shows that the majority of the candidates (68.92%) scored high marks. In part (a), most of these candidates correctly created the database and its two tables with appropriate field names, data types, and primary keys. In part (c), the candidates correctly created the relationship between the client and the product table. Moreover, in part (d), these candidates correctly created the client and product entry forms using wizard sequential control and used the created form to enter the records provided in part (e). It was observed that some of the candidates faced difficulties in validating the unit price in the product table for the price which is less than 120000 in part (f). Other candidates calculated the field (Amount) (which is the product of quantity and Unit price) without using fields from different tables. Extract 13.1 presents a sample of correct responses from one of the candidates.

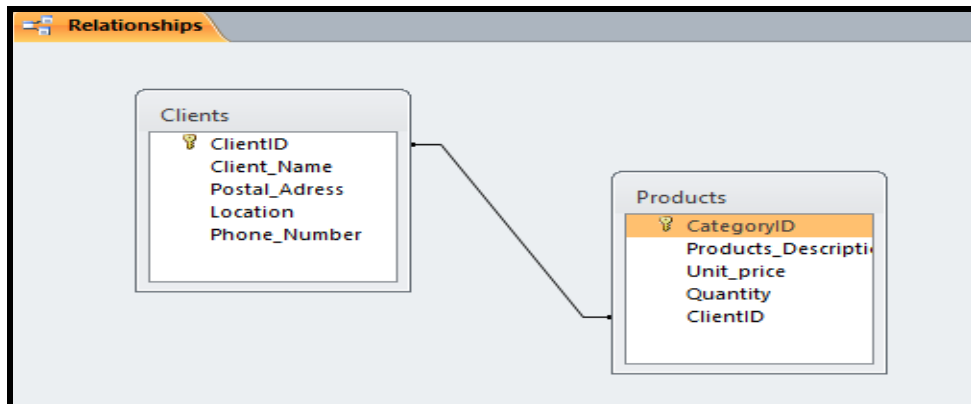
Clients						
ClientID	Client_Name	Postal_Adre	Location	Phone_Num	Click to Add	
KSB001	Stephen	30	Morogoro	782445566		
KSB004	Emily	190	Dar es salaam	754002233		
KSB009	Magoli	650	Mwanza	782123456		
KSB026	ally	79	Dar es salaam	655889911		
KSB120	Mwalinu	354	Mbeya	754666666		

Clients	
Field Name	Data Type
ClientID	Text
Client_Name	Text
Postal_Address	Number
Location	Text
Phone_Number	Number

Products						
CategoryID	Products_De	Unit_price	Quantity	ClientID	Click to Add	
COMP200	Apple 120GB	1000000	8	KSB120		
DVD001	samsung DVD	300000	12	KSB001		
TV006	14 Toshiba Tv	200000	30	KSB026		
TV007	21 LG TV	400000	20	KSB004		
TV009	14 ZEC TV	150000	10	KSB009		

Products	
Field Name	Data Type
CategoryID	Text
Products_Description	Text
Unit_price	Number
Quantity	Number
ClientID	Text

General	
Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	0
Validation Rule	<1200000
Validation Text	wrong price Entered
Required	No
Indexed	No
Smart Tags	
Text Align	General



Clients

ClientID	<input type="text" value="KSB120"/>
Client_Name	<input type="text" value="Mwalinu"/>
Postal_Address	<input type="text" value="354"/>
Location	<input type="text" value="Mbeya"/>
Phone_Number	<input type="text" value="754666666"/>

Products

CategoryID:

Products_Description:

Unit_price:

Quantity:

ClientID:

Products **CalculatedQuery**

ClientID	Client_Name	Location	Products_Description	Quantity	Unit_price	Amount
KSB004	Emily	Dar es salaam	21 LG TV	20	400000	8000000
KSB001	Stephen	Morogoro	samsung DVD p	12	300000	3600000
KSB026	ally	Dar es salaam	14 Toshiba Tv	30	200000	6000000
KSB120	Mwalinu	Mbeya	Apple 120GB	8	1000000	8000000
KSB009	Magoli	Mwanza	14 ZEC TV	10	150000	1500000

Field:	ClientID	<input checked="" type="checkbox"/> Client_Name	Location	Products_Description	Quantity	Unit_price	Amount: [Quantity]*[Unit_price]
Table:	Clients	Clients	Clients	Products	Products	Products	
Sort:							
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:							
or:							

Extract 13.1: A sample of the candidate's correct responses to question 2 of paper 2

Extract 13:1 shows samples of responses from the candidate who observed the order of the word created client and product tables with their appropriate data type and primary keys. The candidates also correctly created correctly the relationship between two tables and their required forms and calculated queries.

Likewise, some of the candidates (25.24%) who scored average marks correctly created a database with appropriate tables and datatype. However, some of them faced difficulties in assigning the datatype for the Phone_Number field. These candidates assigned a number as the datatype

that does not allow leading zeros. In part (c), some of these candidates failed to create relationship because they failed to identify the foreign key. However, these candidates correctly created a columnar form for each table and saved with their appropriate names in part (d). Likewise, these candidates lacked knowledge in validating the unit price in the product table for a price less than 120000 in part (f). Some of them also faced difficulties in creating the calculated query in part (g) because of a lack of knowledge about the syntax of the calculated field. This indicates that these candidates had insufficient competence on using Ms.-Access advanced features.

Apart from the candidates' good performance, few candidates (5.84%) scored low marks. Some of these candidates created the correct database and tables but failed to assign correct datatype to the fields. However, some of the candidates failed to assign correct field names. For example, one of the candidates wrote *field1*, *field2*, *field3* instead of the field names provided. Other candidates failed to create a relationship between two tables because they failed to identify the primary key and foreign key. It was also noted that the same candidates created the calculated query which failed to retrieve the required information such as client_ID, client Name, Location, Product description, Quantity, Unity Price, and Amount. It was also noted that some of the candidates failed to create the entry form for both tables. This indicates that the candidates lacked knowledge of database design. Extract 13.2 presents a sample of incorrect responses from one of the candidates.


CLIENT AND PRODUCT								
CLIENT ID	CLIENT-NAME	POSTAL-ADDRESS	LOCATION	PHONE-NUMBER	CATEGORY	PRODUCT-DESCRIPTION	UNIT-PRICE	QUANTITY
KSB001	EMILY	190	DAR EA SALAAI	0754002233	TV007	21 LG TV	400,000	20
KSB004	STEPHEN	30	MOROGORO	0782445566	DVD001	SAMSUNG	300,000	12
KSB009	MAGOLI	650	MWANZA	0782123456	TV009	14 ZEC TV	150,000	10
KSB026	ALLY	79	DAR ES SAALAM	0655889911	TV006	14 TOSHIBA TV	200,000	30
KSB120	MWALIMU	354	MBEYA	0754666666	COMP200	APPLE 120GB	1,000,000	8

CLIENT AND PRODUCT	
Field Name	Data Type
CLIENT ID	Text
CLIENT-NAME	Text
POSTAL- ADDRESS	Text
LOCATION	Text
PHONE-NUMBER	Text
CATEGORY	Text
PRODUCT-DESCRIPTION	Text
UNIT-PRICE	Text
QUANTITY	Text
NUMBER	Text

by improving customer services offered on their website. The system enables the customers to download a form or register online. Customers can download the registered form after filling the customer details. You have been asked to assist the TRA to accomplish the task;

- (a) Use the Microsoft word to design the following form that allows the user to fill details required to be registered by the system. Save it as Details form.

TANZANIA REVENUE AUTHORITY



CLIENT INFORMATION

NAME:

CELLPHONE:

EMAIL:

NATIONALITY:

GENDER: ☒ Male ☐ Female

HOME ADDRESS:

PAYMENT INFORMATION

PAYMENT DATE:			
PAYMENT METHOD:	<input checked="" type="checkbox"/> Monthly	<input type="checkbox"/> Year	
AMOUNT PAID:			
RECEIVED BY:			

Form descriptions

- The style of the heading “TANZANIA REVENUE AUTHORITY” should be WordArt with Gradient fill – Gold, Accent 4 with size 22.
- The font type and size of the text “TRA” within the logo should be Calibri and 12 respectively.
- The font type, background color and size of the text “CLIENT INFORMATION” and “PAYMENT INFORMATION” should be Arial, grey and 16 respectively.
- The font type and size of other texts within the form should be “Bahnschrift Light Condensed”, 16 respectively.
- The diagonal text watermark should be “TANZANIA REVENUE AUTHORITY”.

- (b) Use Microsoft word to design the following customer registered certificate. Save it as Registered. **Hint:** (Use border from the Microsoft publisher).



Certificate descriptions

- The font type and size of the text “TIN: 000000100” should be Times New Roman and 9 respectively.
- The colour of the horizontal object aligned with the logo should be blue bounded by the line with colour: orange, Accent 6 and width 1.5.
- The font type and size of the text “TRA” within the logo should be Calibri and 8 respectively.
- All logo shapes should be filled with blue colour.
- The font type and size of the text “CERTIFICATE OF REGISTRATION FOR TAXPAYER...” should be Calibri and 6 respectively with the line spacing 1.5.

- The font type and size of the text “TANZANIA REVENUE AUTHORITY” and “THIS IS TO CERTIFY THAT” should be Times New Roman and 8 respectively.
- The font type and size of the text “ODONG ODWAA ODOCH” should be Calibri and 9 respectively.
- The font type and size of the text “000 – 000 - 100” should be Calibri and 6 respectively.
- The font type and size of the signature “DpDp” should be French Script MT and 6 respectively.
- The font type and size of the text “ATUFIGWEGE MWAKABUKU” should be Agency FB and 6 respectively.
- The font size of other text should be Calibri with the size of 6.

The candidates who’ attempted this question were 2,406, which was about 68.22% of whom 567 scored 0 to 7 marks, 828 scored from 7.5 to 16 marks and 1,011 scored from 16.5 to 25 marks. The performance in this question was good because the majority of the candidates 76.43% scored above 7 marks, as shown in Figure 14.

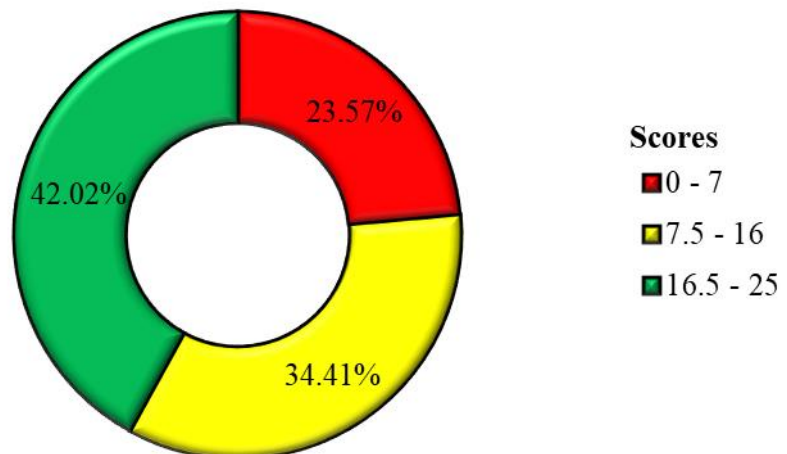



Figure 14: The Candidates’ Performance in Question 3 of Paper 2

The data analysis shows that, among the candidate (42.02%) who scored high marks, majority of them correctly typed the text “TANZANIA REVENUE AUTHORITY” using WordArt feature and applied the gradient fill in part (a). They also correctly designed the logo provided with a text TRA. Moreover, most of these candidates correctly designed a form with different text, containing different font face, font size, textbox, radio button, border, and water mark and inserted the “PAYMENT INFORMATION” table which contained checkbox. However, some of them failed to insert border, and water mark in a detailed form. In part (b), the candidates correctly

designed a certificate in Ms.-Word program with a border copied from Ms.-Publisher. They also created a logo; inserted horizontal object with blue bounded by the line with orange colour, insert official seal and formatting different text with different font size, font face and underlined the text accordingly. However, some of the candidates confused the horizontal object with blue color with orange color. Extract 14.1 presents a sample of correct responses from one of the candidates.

TANZANIA REVENUE AUTHORITY



CLIENT INFORMATION

NAME:
CELLPHONE:
EMAIL:
NATIONALITY:
GENDER: ☒ Male ☐ Female
HOME ADDRESS:

PAYMENT INFORMATION

PAYMENT DATE:			
PAYMENT METHOD:	<input checked="" type="checkbox"/>	Monthly	<input type="checkbox"/>
AMOUNT PAID:			
RECEIVED BY:			



Extract 14.1: A sample of the candidate's correct response to question 3 of paper 2

Extract 14.1: shows a sample of response from a candidate who correctly designed the form that allows the user to fill details required to be registered by the TRA system and the customer registered certificate.

Furthermore, some of the candidates (34.41%) who scored average marks designed a form with part of the logo. It was noted that some of them inserted the text "TANZANIA REVENUE AUTHORITY" using a textbox instead of WordArt. They also failed to set its text properties and gradient fill in the required text. Likewise, these candidates correctly inserted the radio button (male and female) and checkboxes but some of them failed to insert border in the detail form. Besides, in part (b), majority of these candidates managed to insert all the required text and set font name, font size, and font color but failed to design a logo with blue color and an official seal shape as appeared on the certificate. This observation reveals that, candidates had insufficient competence in using some features of Ms.-Word program.

Apart from the average performance, 23.57% of the candidates scored low

marks. Most of these candidates used normal text when typing the text “TANZANIA REVENUE AUTHORITY” with gradient fill -gold, accent 4 instead of the WordArt feature. They also designed inappropriate logos with irrelevant font type, and background color of the text “*CLIENT INFORMATION*” and “*PAYMENT INFORMATION*” However, some of them formatted the texts to their appropriate font face and size. The analysis showed that some of the candidates inserted the text “*PAYMENT INFORMATION TABLE*” with a check box within the table but failed to set the selected monthly payment. Moreover, some of the candidates failed to understand the requirement of the question as they designed the detailed form using notepad while others used Ms.-Publisher instead Ms.-Word. Extract 14.2 presents such an incorrect response from one of the candidates.

TANZANIA REVENUE AUTHORITY
TRA

CLIENT INFORMATION

NAME:

CELLPHONE:

E-MAIL:

NATIONALITY:

GENDER: ☐

HOME ADDRESS:

PAYMENT INFORMATION

PAYMENT DATE	
PAYMENT METHOD	<input style="width: 40px;" type="checkbox"/>
AMOUNT PAID	
RECEIVED BY:	

<u>TANZANIA REVENUE AUTHORITY</u>	
CERTIFICATE OF REGISTRATION FOR TAXPAYER IDENTIFICATION NUMBER (TIN)	
THIS IS TO CERTIFY THAT	
ODONG ODWAA ODOCH	
HAS BEEN REGISTERED WITH THE TANZANIA REVENUE AUTHORITY AND ASSIGNED THE IDENTIFICATION NUMBER	
000-000-100	
WITH EFFECT FROM: 28 JULY 2023	
TRA <u>LOCATION: ARUSHA</u>	
OFFICIAL SEAL 	<u>ATUFIGWEGE MWAKABUKI</u> COMMISSIONER FOR DOMESTIC REVENUE

Extract 14.2: A sample of the candidate's incorrect response to question 3 of paper 2

Extract 14.2: shows a sample of the response from a candidate who designed inappropriate form. The candidate used WordArt to type the text *TANZANIA REVENUE AUTHORITY* without applying the gradient fill - gold, accent 4. The candidates also failed to design the logo; radio button and home address shape. However, the candidate correctly inserted *PAYMENT INFORMATION TABLE* text with the check box within the table without selecting the monthly payment. Moreover, the candidate correctly typed some text, set font style and font size without designing the log shape, inserting the border from the Ms.-Publisher, shape of official seal and signature.

4.0 ANALYSIS OF PERFORMANCE OF THE CANDIDATES' IN EACH TOPIC

The analysis of the candidates' performance across various topics revealed that a significant majority (97.28%) demonstrated proficiency in the Multiple-Choice Items which were composed from the topics of Computer Evolution, Database as Information System, Computer Networks and Communication, The Computer, Web Development, Word Processing, Presentation, and Multimedia. The candidates also attained good performance on the questions set from the following topics: Spreadsheet (85%), Web Development (83.67%), The internet (83.43%), Database as

Information System (80.28%), Desktop Publishing (77.98%), Word processing (76.43%), Presentation (71.97%), and Computer Networks and Communication (67.65%). The good performance observed was attributed to the accurate interpretation of questions and a comprehensive grasp of the tested topics. These include proficiency in understanding and interpreting HTML codes, creating email accounts, clear comprehension of LAN network topologies, proficient application of desktop publishing (DTP) for creating publications, effective preparation of presentations, skillful manipulation of data within databases, and the ability to create documents using Microsoft Word Processing software. Conversely, the candidates attained average performance on the topics of Computer Handling (47.01%). This average performance was attributed to insufficient knowledge regarding the identification of data backup types and their significance. However, the topic of Multimedia (22.94%) revealed weak performance, largely attributed to a lack of sufficient understanding of video film editing procedures. The performance of the candidates in each topic is summarized in the Appendix attached to with this report.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 CONCLUSION

The results of the 2023 CSEE (Certificate of Secondary Education Examination) in the Information and Computer Studies Examination subject indicated good performance. Analysis of the data revealed that 89.88% of the candidates who sat for the examination passed. The candidates who achieved high scores demonstrated sufficient proficiency in interpreting HTML codes, creating email accounts, clear comprehension of LAN network topologies, proficient application of desktop publishing (DTP) for creating publications documents, effective preparation of presentations, skillful manipulation of data within databases, and the ability to create documents using Microsoft Word Processing software. Conversely, the candidates' who attained low scores lacked sufficient understanding of video film editing procedures and incorrectly interpreted the requirements of the question.

5.2 RECOMMENDATIONS

To improve the candidates' performance in the Information and Computer Studies subject, the following are recommended:

- (a) Teachers should demonstrate the use of video editing software.

- (b) Students should practice using video editing software.
- (c) Teachers should lead students in identifying the types of data backup
- (d) Teachers should demonstrate how to back up data.

Appendix: Analysis of Candidates' Performance per Topic

S/n	Topic	No. of Questions	Percentage of Candidates who Scored 30% of the Marks or Above	Remarks
1.	Computer Evolution, Database as Information System, The Computer, Web Development, Word Processing, Presentation, Desktop Publishing, Spreadsheet and Multimedia	1	97.28	Good
2.	Spreadsheet	1	85.00	Good
3.	Web Development	1	83.67	Good
4.	The Internet	2	83.43	Good
5.	Database as Information System	2	80.28	Good
6.	Desktop Publishing	2	77.98	Good
7.	Word Processing	1	76.43	Good
8.	Presentation	1	71.97	Good
9.	Computer Network and Communication	1	67.65	Good
10.	Computer Handling	1	47.01	Average
11.	Multimedia	1	22.94	Weak

