ZANZIBAR EXAMINATIONS COUNCIL



# CANDIDATES' ITEMS RESPONSE ANALYSIS REPORT FOR THE STANDARD FOUR EXAMINATION 2023

**004 MATHEMATICS** 

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## FOREWORD

The Zanzibar Examinations Council is pleased to present this report on Items Response Analysis for the 2023 Standard Four Examination in English subject. This report has been prepared in order to provide a feedback to students, teachers, parents, policy makers, curriculum developers and other educational stakeholders about the performance of the candidates in this subject.

Standard Four Examination intends to measure to what the extent the candidates have learnt in Lower Primary Education prepare the candidates to join in Upper Primary Education.

The analysis presented in this report is intended to contribute towards the understanding of possible reasons behind the candidates' responses in Mathematics. The report mentions some of the factors that contribute towards the candidates to perform well or bad. The possible factors that lead the candidates to perform better include good knowledge and skills on the examined topics and identification of the demands of the questions.

The factors that may cause the candidates to perform badly such as insufficient knowledge and skills to manipulate equations and lack of knowledge and skills on the examined topics and failure of candidates to identify the demands of the questions

The detailed analysis displays, samples from the candidates' scripts that show poor and good responses has been inserted. Finally, various tables with three different colours that reveals how individual question was performed have been attached.

Hence, the feedback and recommendations provided in this report will enable various stakeholders to take appropriate measures to enhance the performance of the future candidates in Mathematic through the National Examinations prepared in Zanzibar by ZEC.

Finally, Zanzibar Examinations Council would like to express sincere appreciation to the Examination officers and all who participated in the completion of this task.

Dr. RASHID .A .MUKKI

DIRECTOR ZANZIBAR EXAMINATIONS COUNCIL ZANZIBAR

## **1.0 INRODUCTION**

This report on Mathematics subject is based on the analysis of the performance of candidates who sat for Standard Four Education examination, 2023. The report covered the 2009 and 2022 syllabus and adhered to 2022 Zanzibar Standard Four Examination Format of Zanzibar Examinations Council.

Standard Four Examination in mathematics had ten (10) questions distributed in section A, B and C. Questions from section A were two (2) questions. The section B comprised four (4) questions and Section C had four (4) questions. The candidates were required to attempt all questions from each section.

## 2.0 SAMPLED CANDIDATES

The numbers of candidates who have been analyzed were **5,834** equal to **10.39%** to all candidates who sat for this paper. In this analysis, the candidates' scores for each question are interpreted as follows: from 00 to 20 percent is considered as poor, average if the scores range from 21 to 60 percent and good if the candidates' score from 61 to 100 percent.

These performance are shown by using different coloured tables. The colour presented are green colour means good performance, yellow colour means average performance and red colour means for poor performance.

## 3.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE PER QUESTION

This section identifies the questions set for candidates in sections A, B and C. Also it identifies the percentage of candidates who attempted the questions with those who got poor, average and good marks. Finally, the extracts of poor and good responses have been inserted.

## **3.1 SECTION A: OBJECTIVE QUESTIONS**

This section consisted of two (2) questions. Each question carried out ten (10) marks. The candidates were required to answer all two (2) questions whereby, each question carried ten (10) Marks that in total sum twenty (20) marks.

## 3.1.1 QUES TION 1: Multiple Choice Items

This was a compulsory question consisting of five (5) multiple choice from (i to v) items which derived from various topics which are Operations of Numbers, Fractions, Geometry and Operation of metric units with relation to the syllabus.

**Item i:** the candidate required to multiply 234 x 2. The candidate chose the correct answer from the given alternatives: A was 444, B was 446, C was 468 and D was 486.

Item ii: the candidate required to choose the correct sign to be used between  $\frac{4}{9}$  and  $\frac{2}{9}$ 

from the following alternatives: A was 
$$\frac{4}{9} = \frac{2}{9}$$
 B was  $\frac{4}{9} > \frac{2}{9}$ , C was  $\frac{4}{9} < \frac{2}{9}$ 

and D was 
$$\frac{2}{9} > \frac{4}{9}$$
.

- **Item iii:** the candidate required to choose the right angle from the following alternatives: A was equal to 90 degree, B was less than 180 degree, C was less than 90 degree and D was more than 90 degree.
- Item iv: the candidate required to write the correct answer of  $\frac{2}{5} + \frac{3}{5}$  from the given alternatives: A was 6, B was 3, was 2 and D was 1.

**Item v:** the candidate required to choose the correct instrument which used to measure mass from the following alternatives: A was beam balance, B was ruler, was stop watch and D was tape.

Generally these items (i to v) were required to measure remembering and understanding of the candidates from different topics.

This question was attempted by **5,821** that equivalent to **99.25%** of the candidates and **44** which is equal to **0.75%** of the candidates did not attempt this question. The analysis of candidates' performance shown in table 1a: below.

PERFORMANCE ANALYSIS							OVERRALL PERFORMANCE	
POOR		AVERAGE		GOOD				
0 – 2.5		3 – 6		6.5 - 10				
TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%	
3,282	56.38	1,417	24.34	1,122	19.28	2,539	43.62	

The analysis shows that the high percentage of the performance **56.38** of the candidate performed poor this indicates that, the overall performance was average.

**3,282** candidates equal to **56.38%** performed poorly due to the lack of knowledge and skills needed about the topics being measured in this question as illustrated in extract 1.1.

#### Extract 1.1 Sample of poor responses

Choose the correct answer from the given alternatives and put the letter of the correct answer in a box.
 i. 234 × 2 =

 A. 444
 B. 446
 C. 468
 D. 486

16349

- ii. The correct sign to be used between  $\frac{4}{9}$  and  $\frac{2}{9}$ 
  - A.  $\frac{4}{9} = \frac{2}{9}$ B.  $\frac{4}{9} > \frac{2}{9}$ C.  $\frac{4}{9} < \frac{2}{9}$ D.  $\frac{2}{9} > \frac{4}{9}$



Extract 1.1 shows a sample of candidate who performed poorly due to failure to choose the correct alternative; this candidate wrote his/her own numbers in the box instead of writing the correct letter from the given alternatives. Example in item (v) "the instrument used to measure mass is called" the correct answer was "A" but candidate wrote "1765413". This implies that this candidate had inadequate knowledge and skills of assessed topics, also did not understand the demand of the question.

The candidates **1,122** equal to **19.28%** performed well. These candidates' had adequate knowledge and skills needed about the topics being measured in this question from each item and scored high marks as indicated in Extract 1.2.

#### Extract 1.2 Sample of good Responses

- Choose the correct answer from the given alternatives and put the letter of the correct answer in a box.
  - i. 234 × 2 =

A. 444
B. 446
C. 468
D. 486



ii. The correct sign to be used between  $\frac{4}{9}$  and  $\frac{2}{9}$ 

A.  $\frac{4}{9} = \frac{2}{9}$ B.  $\frac{4}{9} > \frac{2}{9}$ C.  $\frac{4}{9} < \frac{2}{9}$ D.  $\frac{2}{9} > \frac{4}{9}$ 

iii. Right angle is

- A. Equal to 90 degree
- B. Less than 180 degree
- C. Less than 90 degree
- D. More than 90 degree

iv. 
$$\frac{2}{5} + \frac{3}{5}$$
 the answer is

- A. 6
- B. 3
- C. 2
- D. 1

v. The instrument used to measure Mass is called

- A. Beam balance
- B. Ruler
- C. Stop watch
- D. Tape

**Extract** 1.2 shows a sample of candidate who performed well. This candidate had good mastery of knowledge and skills of different topics so that they gave correct responses.

## 3.1.2 Question 2: Matching Item Question

This was a compulsory question consisting of five (5) Matching items from

(i to v ), which derived from one topic of Fractions. List A consisted of 5 numbers in term of fractions and list B consisted of 7 decimal numbers.

A

D

3

A



In item i, the candidate required to match  $\frac{2}{10}$  with correct decimal from list B. The candidate wrote the correct response was "D"(0.2).

In item ii, the candidate required to match  $\frac{4}{8}$  with correct decimal in list B. The correct response was "G" (0.5).

In item iii, the candidate required to match  $\frac{3}{4}$  with correct decimal in list B. The candidate wrote the correct response was "A" (0.75).

In item iv, the candidate required to match  $\frac{3}{5}$  with correct decimal from list B. The candidate wrote the correct response was "B" (0.6).

In item v, the candidate required to match  $\frac{1}{4}$  with correct decimal in list B. The candidate wrote the correct response was "F" (0.25).

Generally these items (i to v) were required to measure remembering and understanding on how to change fraction into decimals.

This question was attempted by **5,837%** that equivalent to **99.52%** of the candidates and 28 which is equal to **0.48%** of the candidates did not attempt this question.

The analysis of candidates' performance shown in table 1b below:

Table 1b: Analysis of the candidates' performance

PERFORMANCE ANALYSIS							RALL RMANCE
POOR		AVERAGE		GOOD			
0-2.5		3 – 6		6.5 - 10			
TOTAL		TOTAL	%	TOTAL	%	TOTAL	%
4,791	82.08	450	7.71	596	10.21	1,046	17.92

The analysis shows that the high percentage of the performance **82.08** of the candidate performed poor this indicates that, the overall performance was poor.

**4,791** candidates equal to **82.08%** performed poorly due to lack of knowledge and skills about the topic being measured in this question as illustrated in extract 2.1.

#### Extract 2.1 Sample of Poor Responses

ANSWERS

COLUMN A	i	il	iii	iv	V
COLUMN B	F	D	C	A	G

Extract 2.1 shows a sample of candidate who performed poorly due to failure to match fraction from list A with correct decimal in list B. Example; the candidate wrote F in item "i" as a correct answer

instead of writing D which is a correct answer of this item. This implies that this candidate had inadequate knowledge and skills about the topics being measured.

On the other hand, the candidates 596 equal to 10.21 who performed well. These candidates were aware on the topic of fraction and had the knowledge on how to change fraction into decimal as indicated in Extract 2.2.

## Extract 2.2: Sample of Good Responses

ANSWERS

COLUMN A	i	11	III	iv	V
COLUMN B	D	G	A	В	F

**Extract** 2.2 shows a sample of candidate who performed well. This candidate had good mastery of knowledge and skills about changing fraction into decimal so that his/her got correct answer.

This candidate shows his/her ability to match the fraction from list A with correct decimal in list B correctly.

## 3.2 SECTION B: TO ANSWER ALL QUESTIONS

There were four (04) questions in this section. The candidates were required to answer all four (4) questions. Each question carried eight (08) marks thus making a total of thirty two (32) marks. This section derived from various topics which are geometry, operation of metric units, Currency and Numbers with relation to the syllabus.

## 3.2.1 Question 3: Operation of metric units

The question instructed the candidates to write the line segments from the given figure.

Generally this question required to measure remembering and understanding of the candidates on how to write the line segments from the given figure.

This question was attempted by **4,845** that equivalent to **82.61%** of the candidates and **1,020** which is equal to **17.39%** of the candidates did not attempt this question.

The analysis of candidates' performance shown in table 2a below:

Table 2a: Analysis of the candidates' performance

	OVERALL PERFORMANCE						
POOR		AVERAGE		GOOD			
0 – 2		2.5 - 5		5.5 - 8			
TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%
4,648	95.93	120	2.48	77	1.59	197	4.07

The analysis shows that the high percentage of the performance **95.93%** of the candidate performed poor this indicates that, the overall performance was poor.

4,648 candidates equal to **95.93%** performed poorly due to inadequate knowledge and skills about the topic being measured in this question as illustrated in extract 3.1.

#### Extract 3.1 Sample of Poor Responses

3. Write the line segments from the following figure



Extract 3.1 shows a sample of candidate who performed poorly due to failure to write the line segments. The candidate drew the right angles with 90 degree instead of writing the line segment from the given figure. This implies that this candidate had inadequate knowledge and skills about the topics being measured.

On the other hand, the candidates **77** equal to **1.59%** who performed well. These candidates were aware on the topic of fraction and had the knowledge about the topic being measured as indicated in Extract 3.2.

#### Extract 3.2: Sample of Good Responses



**Extract** 3.2 shows a sample of candidate who performed well. This candidate wrote the line segments correctly. This indicates that the candidate had good mastery of knowledge and skills about the topic being measured.

#### 3.2.2 Question 4: Operation of metric units

The question required the candidates to convert 200 centimetre into metre.

Generally this question required to measure remembering and understanding of the candidates about the topic being measured.

This question was attempted by **4,505** that equivalent to **76.81%** of the candidates and **1,360** which is equal to **23.19%** of the candidates did not attempt this question.

The analysis of candidates' performance shown in table 2b below:

Table 2b: Analysis of the candidates' p	performance
---	-------------

	OVEI PERFOR	RALL RMANCE					
POOR		AVERAGE		GOOD			
0 – 2		2.5 – 5		5.5 - 8			
TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%
3,893	86.42	466	10.34	146	3.24	612	13.58

The analysis shows that the high percentage of the performance **86.42** of the candidates performed poor this indicates that, the overall performance also was poor.

3,893 candidates equal to **86.42%** performed poorly due to the limited knowledge and skills about the topic being measured in this question as illustrated in extract 4.1.

#### Extract 4.1 Sample of Poor Responses

4. Convert 200 centimetre into metre.



Extract 4.1 shows a sample of candidate who performed poorly. This candidate wrote 1 cm = 60 sec instead of relating centimetre with metre. This implies that the candidate failed to understand the demand of the question, also had inadequate knowledge and skills about the topics being measured. On the other hand, the candidates **146** equal to **13.24%** who performed well. These candidates were aware on the topic being measured as indicated in Extract 4.2.

#### Extract 4.2: Sample of Good Responses



**Extract** 4.2 shows a sample of candidate who performed well. This candidate converts 200cm into metre and got the correct answer. This indicates that the candidate had sufficient knowledge and skills about the topic being measured.

## 3.2.3 Question 5: Operation of metric units

The question required the candidates to write how many 2000 shillings are in 10,000 shillings note.

Generally this question required to measure understanding of the candidates about the topic of currency.

This question was attempted by **5,747** that equivalent to **97.99%** of the candidates and **118** which is equal to **2.01%** of the candidates did not attempt this question.

The analysis of candidates' performance shown in table 2c below:

Table 2c: Analysis of the candidates' performance

	OVEI PERFOR	RALL MANCE					
POOR		AVERAGE		GOOD		I LIU OF	
0 – 2		2.5-5		5.5 - 8			
TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%
5,463	95.06	213	3.71	71	1.23	284	4.94

The analysis shows that the high percentage of the performance **95.06** of the candidates performed poor this indicates that, the overall performance was poor.

**5,463** candidates equal to **95.06%** performed poorly due to lack knowledge and skills about the topic being measured in this question as illustrated in extract 5.1.

## Extract 5.1 Sample of Poor Responses

5. How many 2000 *shillings* note are in 10,000 *Shillings* Note?



Extract 5.1 shows a sample of candidate who performed poorly. This candidate added 2000 and 10,000 instead of writing how many 2000 shillings are there in 10,000 shillings note. This indicates that the candidate failed to understand the demand of the question, also had inadequate knowledge and skills about the topics of currency.

On the other side, the candidates **71** equal to **1.23%** who performed well. These candidates had adequate knowledge and skills about the topic of currency as indicated in Extract 5.2

## Extract 5.2: Sample of Good Responses

5. How many 2000 *shillings* note are in 10,000 *Shillings* Note?



**Extract** 5.2 shows a sample of candidate who performed well. This candidate wrote the total numbers of 2000 shillings are in 10,000 shillings note correctly. This indicates that the candidate had sufficient knowledge and skills about the topic of currency.

## **3.2.4 Question 6: Operations of Numbers**

The question required the candidates to write the following numbers; (a) 9926 and (b) 17815 in expanded form.

Generally this question required to measure understanding of the candidates about operations of numbers.

This question was attempted by **5,186** that equivalent to **88.42%** of the candidates and **679** which is equal to **11.58%** of the candidates did not attempt this question.

The analysis of candidates' performance shown in table 2d below:

Table 2d: Analysis of the candidates' performance

PERFORMANCE ANALYSIS							RALL RMANCE
POOR		AVERAGE		GOOD			
0 – 2		2.5 – 5		5.5 - 8			
TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%
4,518	87.12	325	6.27	343	6.61	668	12.88

The analysis shows that the high percentage of the performance **87.12** of the candidates performed poor this leads the overall performance to be poor.

**4,518** (**87.12%**) of the candidates performed poorly due to lack knowledge and skills about the topic of operations of numbers as indicated in extract 6.1.

#### Extract 6.1 Sample of Poor Responses

6. Write the following numbers in expanded form. a) 9926 Work space Mine thousand nine hundred and twenty rix b) 17815 Work space Seventeen thousand eight hundred

Extract 6.1 shows a sample of candidate who performed poorly. This candidate wrote the given numbers from part (a) and (b) in word instead of writing those numbers in expanded form. This indicates that the candidate failed to understand the demand of the question, also had inadequate knowledge and skills about the topic being measured.

On the other hand, the candidates **343** (6.61%) performed well. These candidates had adequate knowledge and skills about the topic being measured as indicated in Extract 6.2.

#### Extract 6.2: Sample of Good Responses

6. Write the following numbers in expanded form. a) 9926 Work space = 9000+900+20+6 Therefore; 9926=9000+900+20+6 b) 17815 Work space -10,000+7000+900+10+5 Therefore; 17815=10,000+7000+800+10+5

**Extract** 6.2 shows a sample of candidate who performed well. This candidate wrote the numbers in in part (a) and (b) in expanded form correctly. This indicates that the candidate had sufficient knowledge and skills about the topic being measured.

## **3.3 SECTION C: TO ANSWER ALL QUESTIONS**

There were four (04) questions in this section. The candidates were required to answer all four (4) questions. Each question carried eight (12) marks thus making a total of forty eight (48) marks. This section derived from various topics which are Operation of metric, Operation of numbers, and Algebra with relation to the syllabus.

## 3.3.1 Question 7: Operations of Numbers

The question required the candidate to find the total money spent by Haji to bought 2 mobile phone 25,000 shillings, 1 hat for 4,000 shillings and 4 soap bars for 500 shillings.

Generally this question required to measure understanding and knowledge of the candidates on using money in real life situation.

This question was attempted by **5,246** that equivalent to **89.45%** of the candidates and **619** which is equal to **10.55%** of the candidates did not attempt this question.

The analysis of candidates' performance shown in table 3a below:

Table 3a: Analysis of the candidates' performance

PERFORMANCE ANALYSIS							OVERALL PERFORMANCE	
PO	OR	AVERAGE		GOOD				
0 –	3.5	4 – 7.5		8 – 12				
TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%	
3,456	65.88	1,268	24.17	522	9.95	1,790	34.12	

The analysis shows that the high percentage of the performance **65.88** of the candidates performed poor this leads the overall performance to be average.

**3,456 (65.88%)** the majority of the candidates performed poorly due to lack knowledge and skills about the topic being measured as indicated in extract 7.1.

#### Extract 7.1 Sample of Poor Responses

7. Haji bought 2 mobile phones for 25,000 *shillings*,1 hat for 4,000 *shillings* and 4 soap bars for 500 *shillings*. How much did he spend?

Work space

2: 2.5,000 + 14000 + 4500 0.4350 0

Extract 7.1 shows a sample of candidate who performed poorly. This candidate wrote the numbers and added them instead of finding the money that was spent. This indicates that the candidate failed to understand the demand of the question, also had insufficient knowledge and skills about the topic being measured.

On the other hand, the candidates **522** (**9.95%**) performed well. These candidates had sufficient knowledge and skills about the topic being measured as indicated in Extract 7.2.

#### Extract 7.2: Sample of Good Responses

7. Haji bought 2 mobile phones for 25,000 shillings,1 hat for 4,000 shillings and 4 soap bars for 500 shillings. How much did he spend?



**Extract** 7.2 shows a sample of candidate who performed well. This candidate solved the question and got the correct answer. This indicates that the candidate had sufficient knowledge and skills about the topic being measured.

#### **3.3.2** Question 8: Operations of Numbers

The question required the candidate to subtract the following numbers; (a) 99580 - 75692 and (b) 5382 - 4261.

Generally this question required to measure understanding and knowledge of the candidates on using operation of numbers.

This question was attempted by **5,644** that equivalent to **96.23%** of the candidates and **221** which is equal to **3.77%** of the candidates did not attempt this question.

The analysis of candidates' performance shown in table 3b below:

Table 3b: Analysis of the candidates' performance

	PE	OVERALL PERFORMANCE					
POOR AVERAGE					GOOD		
0-3.5 4-7.5			8 - 12				
TOTAL	%	TOTAL	%	TOTAL %		TOTAL	%
2,928	51.88	2,030	35.97	686	12.15	2,716	48.12

The analysis shows that the high percentage of the performance **51.88** of the candidate performed poor this indicates that, the overall performance was average.

**2,928** equal to (**51.88%**) of the candidates performed poorly due to lack of knowledge and skills about the topic being measured as indicated in extract 8.1.

#### Extract 8.1 Sample of Poor Responses

- 8. Subtract the following numbers.
  - a) 99580 75692

## Work space

	9	P	<sup>°</sup> 5	'8	0	
-	7	5	6	٩	2	
1	2	3	8	9	2	

b) 5382 - 4261

## Work space

Extract 8.1 shows a sample of candidate who performed poorly. This candidate wrote 0 - 2 = 2 in part (a) on the right hand side; also in part (b) his/her wrote 8 - 6 = 3 on the second column from right hand side instead the correct answer. This indicates that the candidate failed to subtract correctly and to get the correct answer.

On the other hand, the candidates **686(12.15%)** performed well. These candidates had sufficient knowledge and skills about the topic being measured as indicated in Extract 8.2.

#### Extract 8.2: Sample of Good Responses

8. Subtract the following numbers.

a) 99580 - 75692



b) 5382 - 4261



**Extract** 8.2 shows a sample of candidate who performed well. This candidate subtracts the given number in part (a) and (b) correctly and gets the correct answer. This indicates that the candidate had sufficient knowledge and skills about the topic operations of numbers.

## 3.3.3 Question 9: Operations of Numbers

The question required the candidate to convert how many hours in two days.

Generally this question required to measure understanding and remembering of the knowledge about the conversion of time and days.

This question was attempted by **4,252** that equivalent to **72.50%** of the candidates and **1,613** which is equal to **27.50%** of the candidates did not attempt this question. The analysis of candidates' performance shown in table 3c below:

	OVERALL PERFORMANCE						
POOR		AVERAGE		GOOD			
0-3.5		4-7.5		8 - 12			
TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%
3,184	74.88	928	21.83	140	3.29	1,068	25.12

Table 3c: Analysis of the candidates' performance

The analysis shows that the high percentage of the performance **74.88** of the candidate performed poor this indicates that, the overall performance was average.

**3,184** equal to (**74.88%**) of the candidates performed poorly due to lack of knowledge and skills about the topic being measured as indicated in extract 9.1.

#### Extract 9.1 Sample of Poor Responses

b)

9. a) How many hours in two (2) days? Work space



Extract 9.1 shows a sample of candidate who performed poorly. This candidate wrote only the statement in part (a); "they are 14 days in are 2 days" which was wrong answer instead of finding how many hours in 2 days. The candidate also failed to multiply hour and minutes in part (b). This indicates that the candidate failed to understand the demand of the question also had a minimum knowledge and skills of the topic being measured.

On the other side, the candidates **140** (**3.29%**) performed well. These candidates had adequate knowledge and skills about the topic being measured as indicated in Extract 9.2.

#### Extract 9.2: Sample of Good Responses

9. a) How many hours in two (2) days? Uay = 24 hr 2day = ? Iday = ? Iday = ? Iday = ? 2day x 24 hr2x 24 hr = 48 hr b) Workout



**Extract** 9.2 shows a sample of candidate who performed well. This candidate find hours in two days correctly also multiply 7hours and 20 minutes correctly and got correct answer in part (a) and part (b). This indicates that the candidate had sufficient knowledge and skills about the topic operations of metric units.

## 3.3.4 Question 10: Algebra

The question required the candidate to simplify the following expressions (a) 5y + 5y + 42x + 35x + 2y and (b) 54z - 12v + 30v - 35z.

Generally this question required to measure understanding of the candidate about the topic of algebra.

This question was attempted by **5,396** that equivalent to **90.00%** of the candidates and **469** which is equal to **8.00%** of the candidates did not attempt this question.

The analysis of candidates' performance shown in table 3d below:

Table 3d: Analysis of the candidates' performance

	OVERALL PERFORMANCE							
PO	OR	AVERAGE		GO	GOOD			
0-3.5 4-7.5			7.5	8 - 12				
TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%	
4,251	78.78	494	9.15	651	12.07	1,145	21.22	

The analysis shows that the high percentage of the performance **78.78** of the candidate performed poor this indicates that, the overall performance was average.

**4,251** equal to (**78.77%**) of the candidates performed poorly due to lack of knowledge and skills about the topic being measured as indicated in extract 10.1.

#### Extract 10.1 Sample of Poor Responses

Simplify the following expressions. 10.

a). 
$$5y + 5y + 42x + 35x + 2y$$
  
Work space  
Solu  
 $5y+5y+42x+35x+2y$   
 $-12y+82x$ 

b) 54z - 12v + 30v - 35z

Work space

Sola, 542-12V+30V-352 =44V-92

Extract 10.1 shows a sample of candidate who performed poorly. This candidate failed to add the expression and wrote 5y + 5y + 42x + 35x + 2y = 12y + 82x in part (a) and in part (b) wrote 54z - 12y+ 30v - 35z = 44v - 9z instead of writing the correct answer as required. This indicates that the candidate had insufficient knowledge and skills about addition and subtraction on the given expressions

On the other hand, the candidates 651(12.07%) performed well. These candidates had sufficient knowledge and skills about the topic being measured as indicated in Extract 10.2.

#### Extract 10.2: Sample of Good Responses

10. Simplify the following expressions.



**Extract** 10.2 shows a sample of candidate who performed well. This candidate adds and subtracts the given expressions and got the correct answer in all part (a) and (b). This indicates that the candidate had sufficient knowledge and skills about the topic of algebra, also understood the demand of the question.

## 4.0 CONCLUSION

The analysis of the candidates' performance shows that there were three questions which had good performance, five questions had average performance and two questions were poorly performed. Good performance was observed in question one, two and three. The candidates had average performance in five, six, seven, nine and ten the remaining questions which were four and eight had poor performance.

Generally, the quality of candidates' responses was affected by the following factors; failure to use basic operations of numbers, insufficient knowledge and skills to solve some problems and poor computation skills, candidates had lack of knowledge and skills on the examined topics, English language barrier to the candidates in understanding the questions and failure to relate some topics with real environment and failure to meet the demands of the questions.

It is expected that the feedback provided in this report will allow teachers, students and other stakeholders to take appropriate measures to improve the teaching and learning of Mathematics subject in Zanzibar Secondary Schools.

## 5.0 RECOMMENDATIONS

In order to raise the standard of performance in this subject, it is recommended that;

- a. The candidates should be given many exercises to get experience in order improve the knowledge and skills to solve the questions correctly.
- b. The candidates have to be encouraged to build the habit of reading the question once, twice thrice in order to identify the demand of any task/question.
- c. The teachers must make sure that all topics in the syllabus are covered before taken place the examination.
- d. Teachers should understand the learning difficulties of students in order to give the special help.
- e. The Ministry of Education and Vocational Training should conduct seminars and in service training to mathematics teachers, on difficult topics.
- f. Government and education stakeholders should ensure that the teaching and learning environment is conducive for improving performance.

## APPENDIX

# SUMMARY OF CANDIDATES' PERFORMANCE PER QUESTION AND TOPIC WISE IN MATHEMATICS SUBJECT 2023

S/N:	TOPIC	Q UESTIO N NUMB ER	PERCENTAGES OF CANDIDATES PER QUESTION	REMARK
1	Operations of Numbers, Fractions, Geometry and Operations of metric Units	1	70.24	GOOD
2	Fractions	2	67.8	GOOD
3	Geometry	3	75.83	GOOD
4	Currency	5	48.66	AVERAGE
5	Operations of metric Units	9	30.64	AVERAGE
6	Algebra	10	38.64	AVERAGE
7	Operations of Numbers	6	28.96	AVERAGE
8	Operations of Numbers	7	27.39	AVERAGE
9	Operations of metric Units	4	8.52	POOR
10	Operations of Numbers	8	2.87	POOR