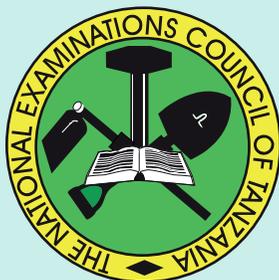


**THE NATIONAL EXAMINATIONS COUNCIL OF TANZANIA**



**CANDIDATES' ITEMS RESPONSE ANALYSIS REPORT  
FOR THE ADVANCED CERTIFICATE OF SECONDARY  
EDUCATION EXAMINATION (ACSEE) 2017**

**113 GEOGRAPHY**

**THE NATIONAL EXAMINATIONS COUNCIL OF TANZANIA**



**CANDIDATES' ITEMS RESPONSE ANALYSIS REPORT  
FOR THE ADVANCED CERTIFICATE OF SECONDARY  
EDUCATION (ACSEE) 2017**

**113 GEOGRAPHY**

*Published by*

The National Examinations Council of Tanzania,  
P.O. Box 2624,  
Dar es Salaam, Tanzania.

**© The National Examinations Council of Tanzania, 2017**

All rights reserved

## TABLE OF CONTENTS

|  |     |
|--|-----|
| FOREWORD.....  | iv  |
| 1.0 INTRODUCTION .....   | 1   |
| 2.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE IN EACH QUESTION ..... | 2   |
| 2.1 113/1 GEOGRAPHY PAPER ONE .....                                | 2   |
| 2.1.1 Question 1: Topographic Map Interpretation .....             | 2   |
| 2.1.2 Question 2: Application of Statistics in Geography .....     | 10  |
| 2.1.3 Question 3: Simple Survey and Map Making .....               | 17  |
| 2.1.4 Question 4: Photograph Interpretation .....                  | 21  |
| 2.1.5 Question 5: Water Masses .....                               | 29  |
| 2.1.6 Question 6: Water Masses .....                               | 35  |
| 2.1.7 Question 7: Space Dynamic .....                              | 42  |
| 2.1.8 Question 8: Space Dynamic .....                              | 51  |
| 2.1.9 Question 9: Water Masses .....                               | 57  |
| 2.2 113/2 GEOGRAPHY PAPER TWO .....                                | 62  |
| 2.2.1 Question 1: Population and Development .....                 | 62  |
| 2.2.2 Question 2: Population and Development .....                 | 69  |
| 2.2.3 Question 3: Population and Development .....                 | 74  |
| 2.2.4 Question 4: Agricultural Development .....                   | 82  |
| 2.2.5 Question 5: Livestock Keeping and Management .....           | 88  |
| 2.2.6 Question 6: Sustainable use of Fuel and Power .....          | 93  |
| 2.2.7 Question 7: Manufacturing Industries .....                   | 101 |
| 2.2.8 Question 8: Transport and Communication .....                | 109 |
| 3.0 PERFORMANCE OF CANDIDATES IN EACH TOPIC .....                  | 118 |
| 4.0 CONCLUSION AND RECOMMENDATIONS .....                           | 119 |

## FOREWORD

The National Examinations Council of Tanzania is pleased to issue this report on Items Response Analysis for the 2017 Advanced Certificate of the Secondary Education Examination (ACSEE) in Geography subject. The report provides feedback to students, teachers, parents, policy makers and the public in general on the performance of the candidates and how well the instructional goals and objectives were met.

The ACSEE marks the end of the two years of high secondary school education. It is a summative evaluation which shows the effectiveness of education and its delivery system. Basically the candidates' responses to the examination questions indicate what the education system was able/unable to offer to the students in their two years of the ACSEE.

In this report factors which contributed to the success and failure of candidates to answer the questions correctly or incorrectly have been analysed. The analysis shows that candidates with higher scores provided appropriate responses, were able to understand the demands of the questions, had basic knowledge on the subject matter, possessed skills in computing and drawing, and they also had a good mastery of the English language and essay writing skills. However, candidates with lower scores lacked most of those qualities.

The feedback provided is expected to enable the education administrators, school managers, teachers and students to identify proper measures to be taken in order to improve the candidates performance in future examinations administered by the Council.

The National Examinations Council of Tanzania will highly appreciate comments and suggestions from teachers, students and the public in general that can be used for improving future examiners' reports. Finally, the Council is grateful to all stakeholders who provided valuable assistance in the preparation of this report.



**Dr. Charles E. Msonde**  
**EXECUTIVE SECRETARY**

## **1.0 INTRODUCTION**

The 2017 Advanced Certificate of Secondary Education Examination (ACSEE) in Geography subject covered the 2009 syllabus and adhered to the 2011 Examination Format. The examination consisted of two papers, One and Two.

Paper One consisted of two sections, A and B. Section A had four questions from the following topics: Topographic Map Interpretation, Application of Statistics in Geography, Simple Survey and Map Making and Photograph Interpretation. Question number 1 was compulsory. Then candidates were required to choose any one question from the three remaining questions in this section. Section B had five questions set from Physical Geography topics out of which candidates were required to attempt any three questions. The candidates were required to attempt a total of 5 questions in this paper.

Paper two consisted of two sections, A and B with a total of eight questions. Section A had three questions set from Population and Development topic and the candidates were required to attempt any 2 questions. Section B had 5 questions set from Regional Focal Studies, out of which candidates were required to attempt any 3 questions. Thus candidates were required to attempt a total of 5 questions in this paper.

This report analyses the 2017 performance of the school candidates who sat for the ACSEE in Geography Subject. The performance in each topic is ranked as weak, average and good if the percentage of candidates who scored 35 percent and above lies in the range of 0 -34, 35 – 59, and 60 – 100 respectively. The report is intended to give feedback to the educational stakeholders on the performance of the candidates on each question by showing what the candidates were required to do as well as the strengths and weakness in their responses.

A total of 34,100 candidates sat for the ACSEE in Geography paper out of which 33,711 candidates (99.19%) passed while 389 candidates (0.81%) failed. Generally, the performance in 2017 increased by 0.23% compared to that of 2016 in which 98.96% of candidates' passed and 1.04% of the candidates failed. Samples of the candidates' answers are attached to

illustrate their responses. It is expected that the report will be useful to educational stakeholders and will enable teachers and students to improve the teaching and learning process in Geography subject.

## **2.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE IN EACH QUESTION**

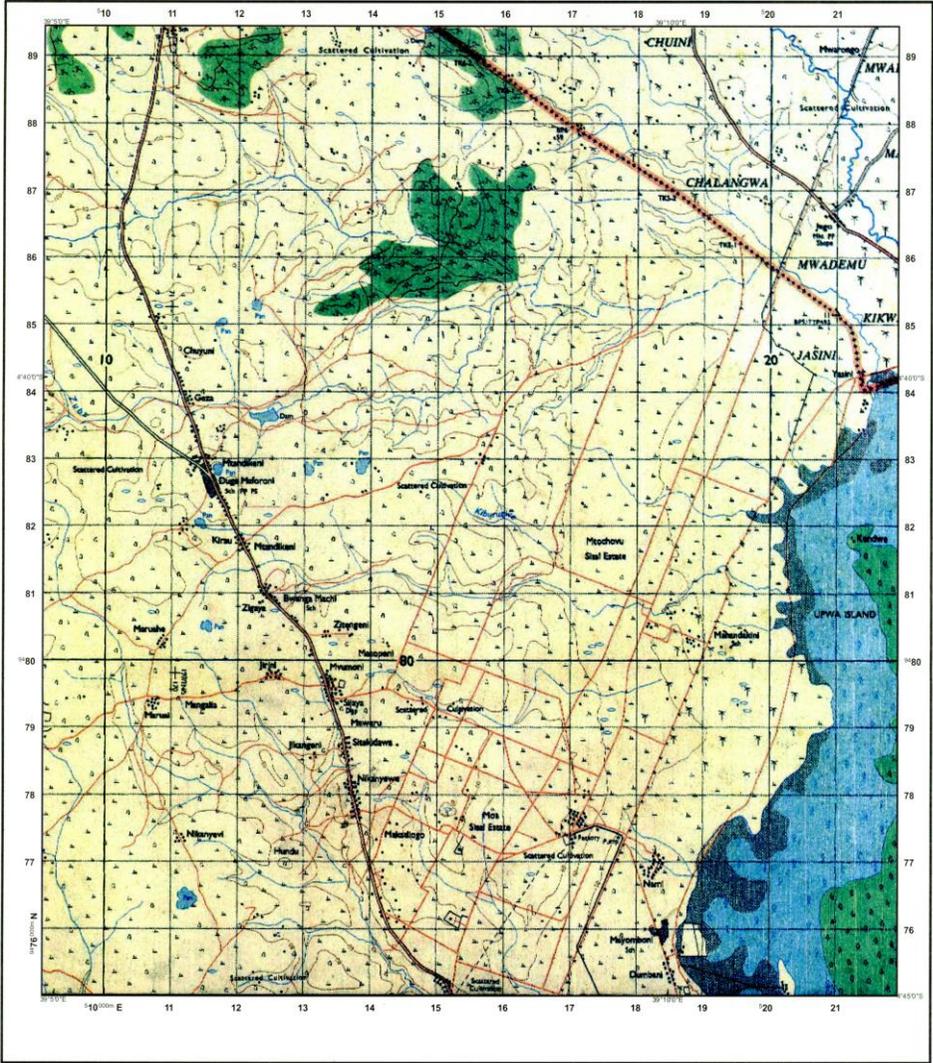
The Advanced Certificate of Secondary Education Examination (ACSEE) in Geography subject is designed to test the candidates' ability to comprehend and apply knowledge in new situations; demonstrate analytical and reasoning skills, interpret geographical phenomena such as physical features, photographs, map work and draw conclusions from those observations and interpretations. Questions expected candidates to handle more of the higher order tasks.

### **2.1 113/1 GEOGRAPHY PAPER ONE**

#### **SECTION A: Topographic Map Interpretation, Application of Statistics in Geography, Simple Survey and Map Making and Photograph Interpretation**

##### **2.1.1 Question 1: Topographic Map Interpretation**

This question consisted of seven parts in which the candidates were required to study carefully the map extract of VANGA sheet 111/1 provided and to: (a) calculate the area covered by mangrove swamp at Upwa Island, (b) describe the nature of transport and communication system of the mapped area, (c) comment on the population distribution of the area and briefly explain three factors that have influenced population distribution at Vanga area, (d) comment on the nature of vegetation found in the area and state if there is any relationship between climatic conditions found in the area with the vegetation cover, (e) identify the economic activities carried out in the mapped area with the support of examples, (f) determine the functions of Vanga sub-urban with vivid examples and (g) describe four factors that have affected the composition of the mapped area. The total marks allocated for this question were 25.



Extract from VANGA, Sheet III/1  
 Series Y 742, Edition 1 - TSD/OSD, Ministry of Lands,  
 Government of the United Republic of Tanzania, 1990

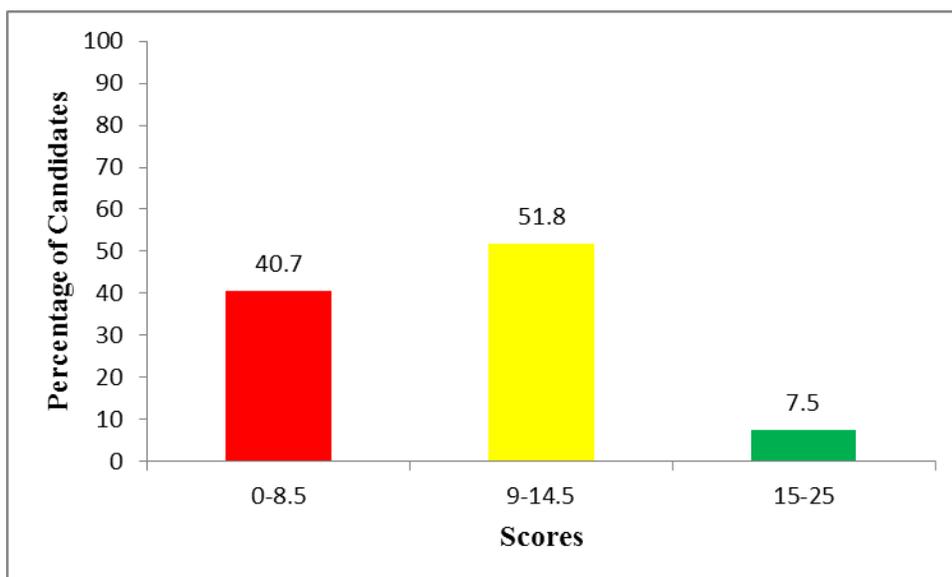
HEIGHTS IN METRES

Scale 1: 50,000



|                                       |   |   |                 |   |
|---------------------------------------|---|---|-----------------|---|
| Town or area with Permanent Buildings | International Boundary                  | Forest  | Crater          | <b>ABBREVIATIONS</b><br>CBP Cotton Baying Post<br>Ch Church<br>CHH Court House<br>DC District Commissioner<br>Disp Dispensary<br>Hosp Hospital<br>HC Health C. enter<br>M Mission<br>Mkt Market<br>MoW Ministry of Works<br>PO Post Office<br>PP Police Post<br>PS Police Station<br>RH Rest House<br>Sch School<br>T Telephone<br>TG Telegraph |
| Other Populated Area, Houses          | Contours (V.L.20m).....Depression       | Thicket   | Lava            |   |
| All Weather Road                      | Air Photo Principal Point with Film No. | Mangrove Swamp  | Sub-surface Dam |   |
| Bound Surface                         | Water Course, Waterfall                 | Riverine Trees  | Windpump        |   |
| All Weather Road                      | Rapids, Dams                            | Plantation(Coffee C, Palm Sisal S, Sugar Su,Wattle W) | Sand Dunes      |   |
| Loose Surface                         | Water Course, ( Wide )                  | Woodland  | Har Rack        |   |
| Dry Weather Road                      | Waterfall Rapids                        | Scrub   | Core            |   |
| Main Track (Motorable)                | Watercourse (Indefinite)                | Scattered Trees                                       | Har Rack        |   |
| Other Track and Footpath              | Borehole, Waterhole, Well, Spring       | Palm Trees  | Outcrop Rock    |   |
| Cut Line                              | Bund, Major Fence, Hedge                | Seasonal Swamp  |                 |   |
| Railway, Siding, Station              | Cliff                                   |   |                 |   |
| Level Crossing                        |   |   |                 |   |
| Railway Light                         |   |   |                 |   |

The question was compulsory, therefore it was attempted by 100 percent of all the candidates whereby 40.6 percent scored from 0.5 to 8.5 marks, 51.8 percent scored from 9 to 14.5 marks, 7.5 percent scored from 15 to 25 marks and 0.1 percent scored a 0 mark. The general performance in this question was average since 59.3 percent of the candidates scored 35 marks and above. Figure 1 below illustrates the candidates' performance.



**Figure 1:** Trend of Candidates' Performance in Question 1.

The candidates who scored from 15 to 25 marks were knowledgeable on Topographical Map Interpretation especially on the concept of measurements of areas, interpretation of economic activities and climate as well as the understanding of various components and features on the map as they managed to: (a) calculate the area covered by mangrove swamp at Upwa Island which was  $10.5km^2$ , they were able to apply correct procedures and formula whereby in the first step, they counted total number of squares. Full square=0, Half squares= $\frac{21}{2}$  total number of squares = 10.5, in the second step they calculated the area of one square= the length of one side of square = 2cm and map scale = 1:50,000 therefore the area of one square = (side x side) or  $side^2 = 1km \times 1km = 1km^2$ . Finally they calculated the area of 10.5 square. Therefore,  $10.5 \times 1square = 10.5km^2$ .

In part (b), they were able to describe the nature of transport and communication system of the mapped area as *land transport* because it is the most dominant type of transport and communication in the mapped area. In part (c) they commented on the population distribution of the area as *unevenly distributed* because there are some areas where there is high population as compared to other areas. For example areas around Duga, Mafoloni, Mayomboni, and Nikanyewe have high population as compared to Mahandakini and Chuini where there is spaced population; they also explained briefly three factors that have influenced population distribution such as: *Transport and communication*. Many people tend to settle along the main roads and tracks. Secondly, *Social services*, was a determinant for population distribution at Vanga area. Areas with good social services like market, schools and roads have been marked as having high population as compared to areas with poor social services. For example, along the main road from South West to North West. Thirdly, *Nature of the relief* was another factor that has influenced population distribution, as areas with gentle slope and steep slope have low population as compared to areas with low land.

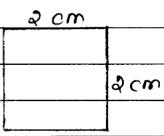
In part (d) the candidates managed to comment on the nature of vegetation found in the area as: In most cases the mapped area is covered by scrubs with little woodland. However, there are also scattered trees and palm trees. For example, area around north east is covered by palm trees with woodland while the remaining part of the mapped area is covered by scrubs which are dominant with little scattered trees. They stated that there is a relationship between climatic conditions found in the area with vegetation cover. Therefore, the mapped area has a *dry climate*.

In part (e), they identified the economic activities carried out in the mapped area with a support of examples. Such economic activities include: *Trading/transportation* due to the presence of all-weather roads and other trucks which cover almost all parts of the mapped area. For example, the main track from South West to North West and the presence of a market (MK) around Mwademu in North East. Secondly, *Agriculture* due to the presence of scattered cultivation that covers almost the whole part of the mapped area and sisal estate at Moa and Mtochovu area to the Eastern side. Thirdly, *fishing* due to the presence of an island such as Upwa and some

rivers such as Kiburuzwe flowing in the mapped area and the existence of a dam near Geza.

However, their marks varied from 15 to 25 depending on the strengths and accurateness of their responses as some of the candidates did not get all the items correctly. Extract 1. 1 represents part of such a good response.

### Extract 1.1

|   |   |
|---|---|
| 1 | <p>(a) Full squares = 0<br/>Half squares = 21 squares</p> <p>To get full squares = <math>\frac{21}{2}</math><br/>= 10.5</p> <div style="text-align: center;">  </div> <p><math>A = \text{side} \times \text{side}</math><br/>Scale = 1cm represents <math>\frac{1}{2}</math> km<br/><math>A = (2 \times \frac{1}{2}) \times (2 \times \frac{1}{2})</math><br/><math>A = 1 \text{ km}^2</math></p> <p><math>\therefore 1 \text{ square} = 1 \text{ km}^2</math><br/><math>10.5 \text{ squares} = ?</math><br/><math>\frac{10.5 \text{ squares} \times 1 \text{ km}^2}{1 \text{ square}}</math><br/><math>\text{Area} = 10.5 \text{ km}^2</math></p> <p>(b) - Land transport<br/>This is due to the presence of All weather road from grid reference 152750 to grid reference 108895</p> |
|---|---|

Extract 1.1 is part of a response from a candidate who managed to answer the question well. In part (a), he/she was able to calculate the area covered by mangrove swamp at Upwa Island and in part (b) managed to describe the nature of transport and communication system of the mapped area.

The candidates who scored from 9 to 14.5 marks had several strengths and weaknesses in answering this question. For example, in part (a), some candidates managed to identify the correct number of full and half squares, correct conversion of the map scale into ground scale, thus they were able to calculate the area covered by mangrove swamp at Upwa Island.

In part (b), some candidates failed to describe the nature of transport and communication system of the mapped area, some described partially the nature of transport and communication system of the mapped area while others were able to describe the nature of transport and communication system of the mapped area with supportive evidences from the map.

In part (c), some candidates managed to comment on the population distribution of the area but failed to explain briefly three factors that have influenced population distribution at Vanga area. Some were able to explain briefly three factors that have influenced population distribution at Vanga area but failed to comment on the population distribution of the area. For instance one candidate explained settlement patterns such as *linear* and *scattered settlement* instead of commenting on the nature of population distribution of the area. This candidate might have confused the two related demographic terms 'population distribution' and 'population settlement'.

In part (d), some candidates managed to comment on the nature of vegetation found in the area and explained the relationship between climatic conditions found in the area with vegetation cover, others were able to comment on the nature of vegetation found in the area but failed to establish the relationship between climatic conditions found in the area with vegetation cover, while others misconceived the question as they explained types of climates such as *Tropical climate*, and *Equatorial climate* instead of climatic condition of an area.

In part (e), some candidates were able to identify the economic activities carried out in the mapped area but they failed to provide examples from map extract to support their answers.

In part (f), some were able to determine the functions of Vanga sub-urban with vivid examples and in part (g), some mixed up relevant and irrelevant

answers. The variation of marks was influenced by the strengths and weaknesses of their answers.

The candidates who scored from 0.5 to 8.5 marks misconceived some of the parts of this question, as they provided incorrect responses contrary to the demand of the question. For example in part (a) some candidates were able to identify full and half squares but could not calculate the area.

In part (b), some failed to describe the nature of transport and communication system of the mapped area measured instead they concluded that it is good due to the presence of *roads, railways* and *telephone lines*.

In part (c), some were not able to comment on the population distribution of the area but managed to list without explaining factors that have influenced population distribution at Vanga area, some mentioned the form of settlements such as: *linear settlement, nucleated settlement* and *scattered settlement* which were wrong responses. Others commented that population distribution is *dynamic* due to *climate* and *soil fertility*. Probably they mixed up the two concepts of population distribution and settlement.

In part (d), commented on the nature of vegetation found at the area as *attractive* and *good because it allows full and well growing of plants* and failed to state the relationship between climatic conditions found in the area with vegetation cover.

In part (e), some mixed up social and economic activities carried out in the mapped area.

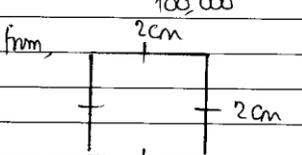
In part (f) some were not able to determine the functions of Vanga suburban with vivid examples instead they stated that the function of Vanga Urban is to *keep the vegetation of an area like shrubs and trees*.

In part (g) some provided relevant and irrelevant factors that have affected the composition of the mapped area like: *growth of towns, employment, unequal distribution of social service* and *contour lines*. Therefore, this shows that the candidates lacked knowledge and skills on the Topographical map Interpretation especially on the concept of determining

directions and measurement of areas as well as understanding features on the map. Unsatisfactory responses led to the candidates to score low marks.

Very few candidates (0.1%) scored a 0 mark. These candidates showed lack of understanding of basic concepts of Topographical Map Interpretation. They failed to provide correct responses in all parts of the question. Extract 1.2 is part of a response from a candidate who performed poorly in this question.

### Extract 1.2

|    |     |  |  |
|----|-----|--|--|
| 1. | (a) | Solution.  |  |
|    |     | Data given   |  |
|    |     | Full square = 10   |  |
|    |     | Half square = $16/2 = 8$   |  |
|    |     | scale = 1:50,000 <sup>2</sup>  |  |
|    |     | Required; to calculate the covered area of the mangrove swamp.   |  |
|    |     | so, we take sum of Full square = 10  |  |
|    |     | Half square = + 8  |  |
|    |     | <u>18 Squares</u>  |  |
|    |     | from the map scale, 1:50,000   |  |
|    |     | we take, 1:100,000   |  |
|    |     | that is, 1km = 100,000cm   |  |
|    |     | ? = 50,000   |  |
|    |     | $\frac{1 \times 50,000}{100,000} = \frac{1 \times 50,000}{100,000} = \frac{5}{10} = \frac{0.5 \text{ km}}{10}$ |  |
|    |     | from,  |  |
|    |     |                             |  |
|    |     | so, we take $18 \times 0.5 = 9 \text{ km}^2$   |  |
|    |     | $\frac{18 \text{ squares}}{\times 0.5 \text{ km}}$   |  |
|    |     | $\frac{90}{10}$  |  |
|    |     | $\frac{90}{10}$  |  |
|    |     | <u>90</u>  |  |
|    |     | Therefore the area covered by mangrove swamp is <u>9 km<sup>2</sup></u>  |  |

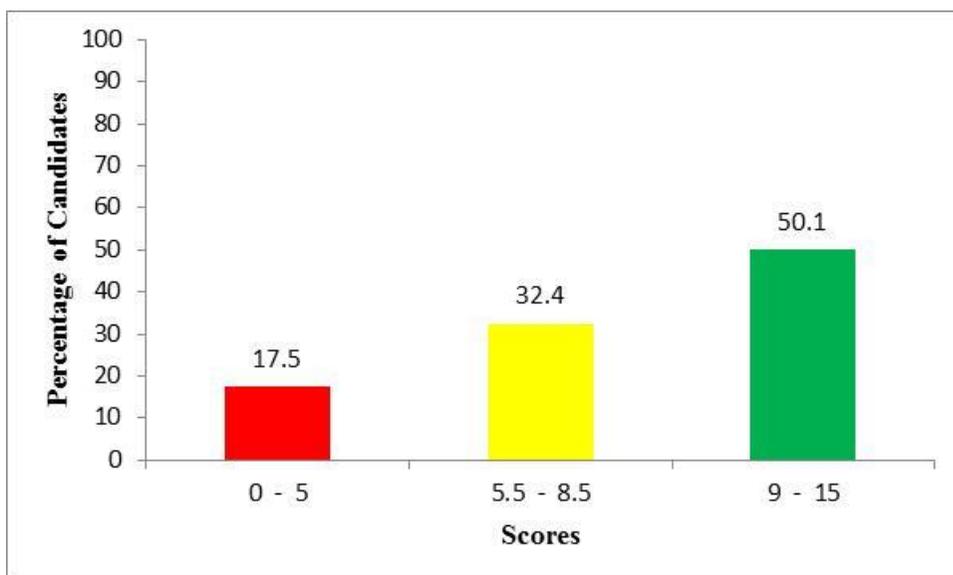
Extract 1.2 shows part of a candidate's response who provided incorrect response in part (a). He/she failed to calculate the area covered by mangrove swamp at Upwa Island from the first step of identifying full and half squares.

## 2.1.2 Question 2: Application of Statistics in Geography

The question required the candidates to study the data in the table given which showed the quantity (in thousands tones) of pyrethrum produced in Kenya from 1980 to 1989 and then to answer the questions that followed.

This question had three parts, (a), (b) and (c). In part (a), the candidates were required to present the data using divergent line graph, in part (b) to comment on the trend of production and in part (c) to give two merits and demerits of the divergent line graph. Total marks allocated for this question were 15.

This question was opted by 87.5 percent of all the candidates. The general performance in this question was good since 82.5 percent of the candidates who attempted it scored 35 marks and above. Data analysis in this question shows that 50.1 percent scored from 9 to 15 marks, 32.4 percent scored from 5.5 to 8.5 marks and 16.9 percent scored from 0.5 to 5 marks and 0.6 percent scored a 0 mark. Figure 2 below illustrates the performance.



**Figure 2:** Trend of Candidates' Performance in Question 2.

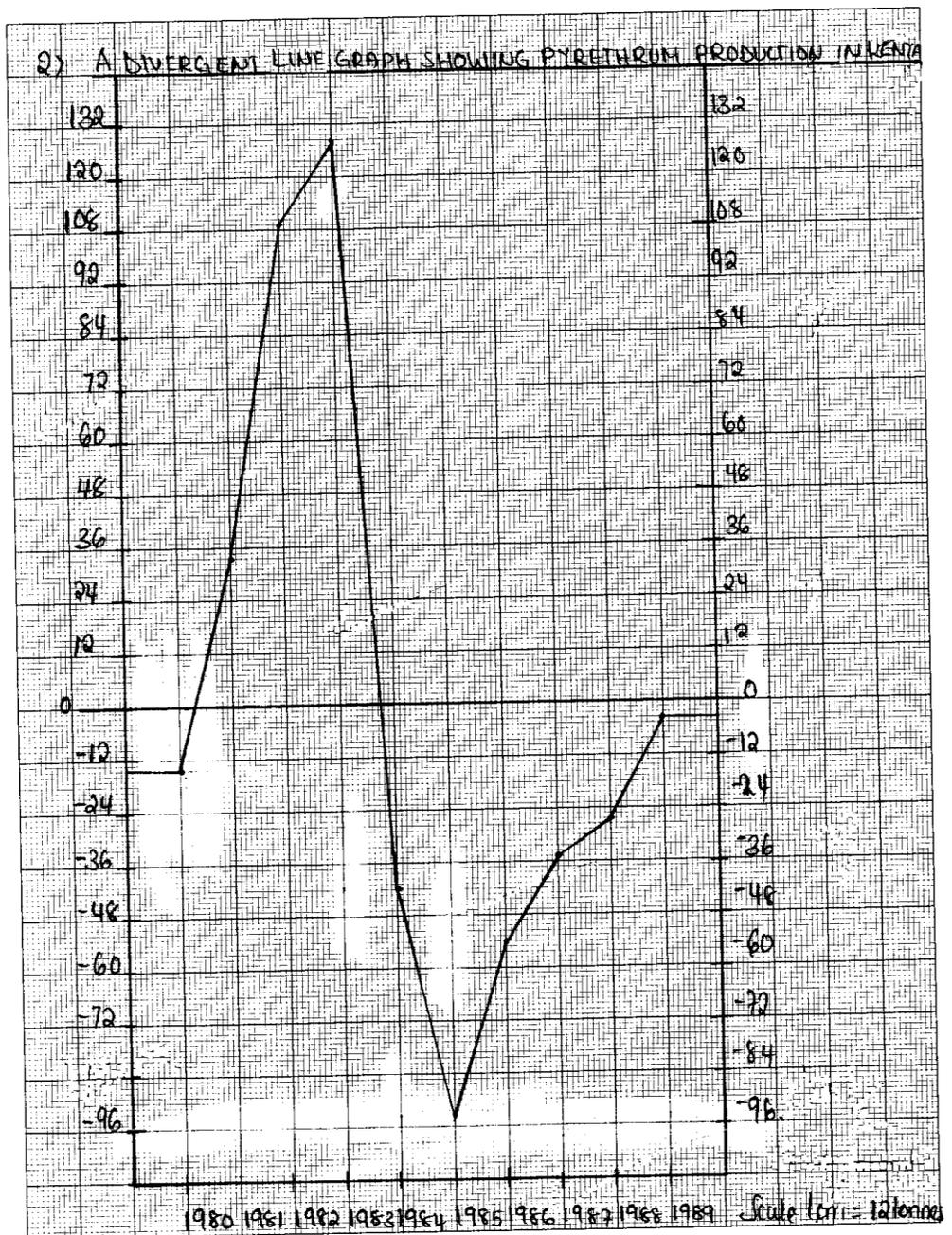
The candidates who scored from 9 to 15 marks managed to answer the question according to its demand, although there were variation of marks depending on the strengths and weaknesses of their responses. These

responses showed that candidates had adequate graphing skills and enough mathematical knowledge on the Statistics in Geography subject especially on the concept of methods of presenting data and interpreting the outcomes of the tasks. For example, in part (a) some candidates were able to obtain the average from all the dependent variables which was 128,800, then were able to subtract the mean from each value (from 1980 to 1989) of the dependent variables so as to get deviations from the mean: 1980: 114,000 - 128,800 = -14,800, 1981: 162,000 - 128,800 = 33,200, 1982: 240,000 - 128,800 = 111,200, 1983: 258,000 - 128,800 = 129,200, 1984: 87,000 - 128,800 = -41,800, 1985: 34,000 - 128,800 = -94,800, 1986: 74,000 - 128,800 = -54,800, 1987: 93,000 - 128,800 = -35,800, 1988: 102,000 - 128,800 = -26,800, and 1989: 124,000 - 128,800 = -4,800. Finally they managed to present the data using divergent line graph.

In part (b) some candidates were able to comment on the trend of production by stating that there is *an increase and decrease of production* and in part (c) some candidates were able to give two merits of the divergent line graph such as: *used to compare production of different years, easy to read and interpret* and demerits of the divergent line graph as: *consume a lot of time and drawn for a one commodity only*. Extract 2.1 is a sample of such a good response.

## Extract 2.1

| 2.   | $\text{Total of tonnes} = 114 + 162 + 240 + 258 + 87 + 34 + 74 + 93 + 100 + 124 = 1288$  |       |               |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
|------|--|-------|---------------|--|------|--------|------|---------------|------|-----|-------|-------|------|-----|-------|------|------|-----|-------|-------|------|-----|-------|-------|------|----|-------|-------|------|----|-------|-------|------|----|-------|-------|------|----|-------|-------|------|-----|-------|-------|------|-----|-------|------|
|      | $\text{Mean} = \frac{\text{Total}}{N} = \frac{1288}{10}$   |       |               |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
|      | $\text{Mean} = 128.8$  |       |               |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
|      | <table border="1"> <thead> <tr> <th>Year</th> <th>Tonnes</th> <th>Mean</th> <th><math>x - \bar{x}</math></th> </tr> </thead> <tbody> <tr> <td>1980</td> <td>114</td> <td>128.8</td> <td>-14.8</td> </tr> <tr> <td>1981</td> <td>162</td> <td>128.8</td> <td>33.2</td> </tr> <tr> <td>1982</td> <td>240</td> <td>128.8</td> <td>111.2</td> </tr> <tr> <td>1983</td> <td>258</td> <td>128.8</td> <td>129.2</td> </tr> <tr> <td>1984</td> <td>87</td> <td>128.8</td> <td>-41.8</td> </tr> <tr> <td>1985</td> <td>34</td> <td>128.8</td> <td>-94.8</td> </tr> <tr> <td>1986</td> <td>74</td> <td>128.8</td> <td>-54.8</td> </tr> <tr> <td>1987</td> <td>93</td> <td>128.8</td> <td>-35.8</td> </tr> <tr> <td>1988</td> <td>100</td> <td>128.8</td> <td>-28.8</td> </tr> <tr> <td>1989</td> <td>124</td> <td>128.8</td> <td>-4.8</td> </tr> </tbody> </table> |       |               |  | Year | Tonnes | Mean | $x - \bar{x}$ | 1980 | 114 | 128.8 | -14.8 | 1981 | 162 | 128.8 | 33.2 | 1982 | 240 | 128.8 | 111.2 | 1983 | 258 | 128.8 | 129.2 | 1984 | 87 | 128.8 | -41.8 | 1985 | 34 | 128.8 | -94.8 | 1986 | 74 | 128.8 | -54.8 | 1987 | 93 | 128.8 | -35.8 | 1988 | 100 | 128.8 | -28.8 | 1989 | 124 | 128.8 | -4.8 |
| Year | Tonnes   | Mean  | $x - \bar{x}$ |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
| 1980 | 114  | 128.8 | -14.8         |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
| 1981 | 162  | 128.8 | 33.2          |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
| 1982 | 240  | 128.8 | 111.2         |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
| 1983 | 258  | 128.8 | 129.2         |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
| 1984 | 87   | 128.8 | -41.8         |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
| 1985 | 34   | 128.8 | -94.8         |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
| 1986 | 74   | 128.8 | -54.8         |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
| 1987 | 93   | 128.8 | -35.8         |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
| 1988 | 100  | 128.8 | -28.8         |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
| 1989 | 124  | 128.8 | -4.8          |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
|      | <p>b. The production is seen to be high in 1983 and very low in 1989 this shows that pyrethrum production in Kenya is declining</p>  |       |               |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
|      | <p>c. Merits</p> <ul style="list-style-type: none"> <li>i It is used to compare production of different years</li> <li>ii Shows a good visual impression</li> </ul>  |       |               |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |
|      | <p>Demerits</p> <ul style="list-style-type: none"> <li>i Consumes a lot of time in construction since it uses a lot of calculations</li> <li>ii It is difficult to interpret since actual values are not presented</li> </ul>  |       |               |  |      |        |      |               |      |     |       |       |      |     |       |      |      |     |       |       |      |     |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |    |       |       |      |     |       |       |      |     |       |      |



Extract 2.1 represents a candidate who provided good responses; this candidate was able to answer well all parts of the question.

The candidates who scored from 5.5 to 8.5 marks had some strengths and weaknesses in their responses in each part of the question. For example in part (a), some candidates managed to obtain the average from all the values of the dependent variables which is 128,800 , subtracted the mean from each value of the dependent variable in order to get deviations from the mean and presented data by using divergent line graph, while others managed to obtain the average from all the values of the dependent variables that is 128,800 , subtracted the mean from each value of the dependent variable in order to get deviations from the mean but failed to present data by using divergent line graph.

In part (b) some candidates managed to comment on the trend of production such as: *From 1980 – 1983, the production increased rapidly to above average where the maximum production was in 1983* and explained possible factors which might have affected the production. Some commented on the trend of production with partial explanations while others failed to comment on the trend of production.

In part (c) some candidates gave two merits and demerits of the divergent line graph correctly, some provided two merits and demerits with partial explanations while others mentioned without providing explanations. This indicates that candidates had partial knowledge and skills on the Statistics in Geography subject especially on the concept of methods of presenting data and interpreting the outcomes of the tasks. Their marks varied due to the strengths and weaknesses in their responses.

The candidates who scored from 0.5 to 5 marks had some weaknesses in their answers. They had inadequate knowledge about the language and rules of graphs or inadequate skills in putting knowledge into practice and problems in defining variables and connecting graphs with variables. For example in part (a) some candidates managed to obtain the average from all the values of the dependent variables but failed to subtract the mean from each value of the dependent variable in order to get deviations from the mean and also failed to present the data using divergent line graph. Some failed to obtain the average from all the values of the dependent variables, to subtract the mean from each value of the dependent variable in order to get deviations from the mean and also to present the data using divergent line graph. Others tried to draw divergent line graph but failed to show

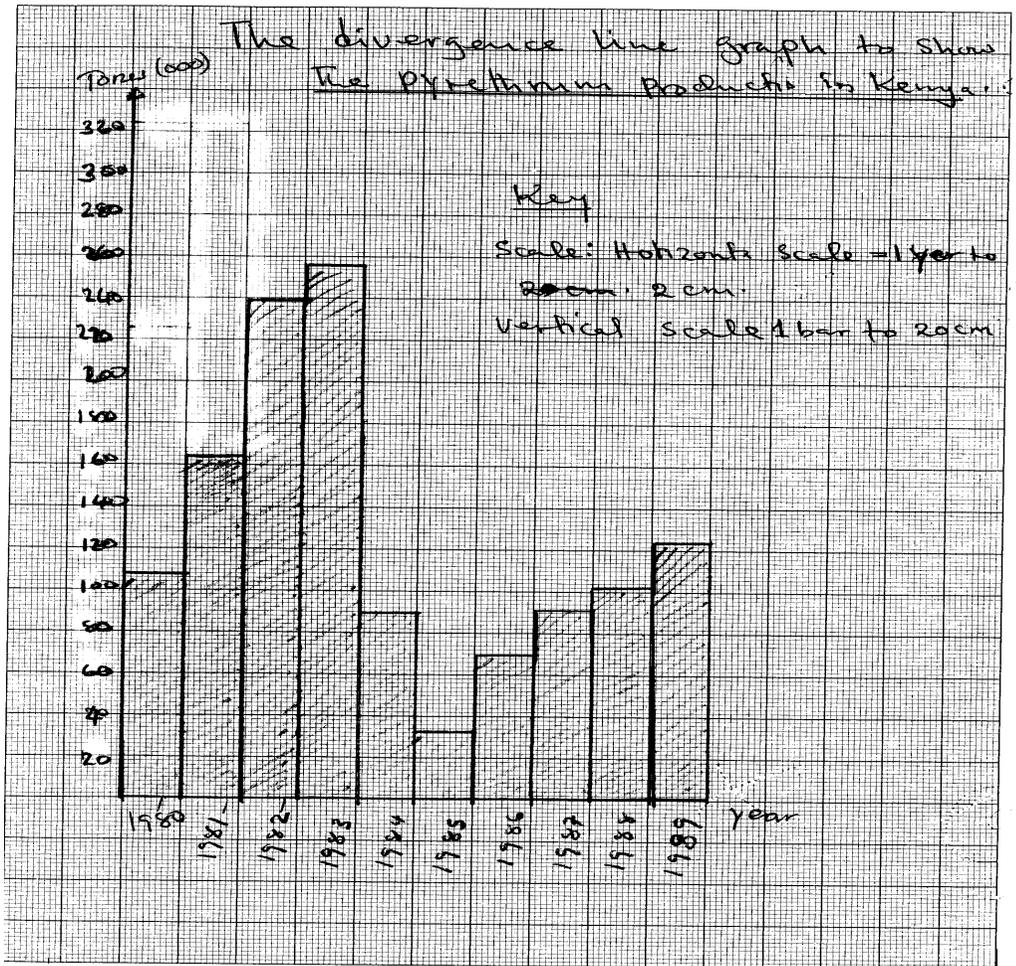
correct location of trend while others provided other types of graphs such as: *simple line graph, simple bar graph, group bar graph* and *compound line graph* instead of divergent line graph.

In part (b) some candidates just stated that *there is rise and fall of production*.

In part (c) some candidates provided the merits of using divergent line graph as: *there is no more calculation and gives clear illustration* and they listed the demerits as: *it is difficult to draw and it is not easy to interpret*. These responses shows that the candidates lacked enough knowledge and skills on the Statistics in Geography subject especially on the concept of methods of presenting data and interpreting the outcomes of the tasks.

A few candidates (0.6%) who scored a 0 mark proved to have inadequate graphing skills as were unable to draw and interpret graphs. These candidates failed to score any part of the question. Some of them failed to understand the demand of the question as they drew a bar graph instead of line graph, while some failed to obtain the average from all the values of the dependent variables, to subtract the mean from each value of the dependent variable in order to get deviations from the mean and also to present the data using divergent line graph. Extract 2.2 is part of a candidate's poor response.

## Extract 2.2

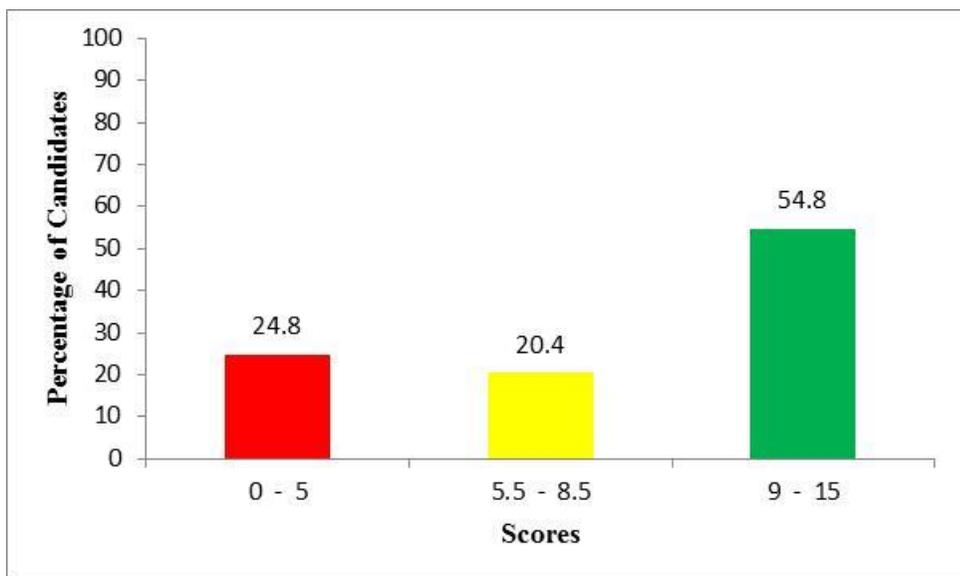


Extract 2.2 indicates part of a candidate's response who misunderstood the demand of the question. He/she drew a simple bar graph instead of divergent line graph.

### 2.1.3 Question 3: Simple Survey and Map Making

This question had two parts, (a) and (b). In part (a) the candidates were supposed to answer the given questions after reading this statement "*During a Compass Survey an amateur Surveyor recorded  $070^{\circ}$  as forward bearings from point X to Y and  $254^{\circ}$  as back bearing*". (a) Correct the discrepancy of these readings (b) identify four sources of errors during the Compass Survey. The question had 15 marks.

This question was opted for by 8.6 percent of the candidates of which 54.8 percent scored from 9 to 15 marks, 20.4 percent scored from 5.5 to 8.5 marks and 22.8 percent scored 0.5 to 5 marks while 2 percent scored a 0 mark. The general performance in this question was good as 75.2 percent of the candidates who attempted it scored from 35 marks and above. Figure 3 below illustrates the performance in this question.



**Figure 3:** Trend of Candidates' Performance in Question 3.

The candidates who scored from 9 to 15 marks managed to provide correct responses despite the fact that their marks varied depending on the strengths and accurateness of their responses which revealed that, the candidates were knowledgeable and skilful on the Simple Survey and Map Making especially on forward and back bearing and errors of closure/disclosure and how to correct it. For example, in part (a) some candidates were able to follow up all procedures of correcting the discrepancy as the question demanded, they were able to find out the mean discrepancy by using this formula: Forward Bearing (FB) – Back Bearing (BB)=180. Given FB=070° and BB 254°. Therefore, 254°-070°=184°, then

$$\text{discrepancy} = +4^\circ \text{ and mean discrepancy} = \frac{+4}{2} = 2^\circ$$

.The corrected FB= 070° + 2°=72° and the corrected BB=254° – 2°=252°. Some managed to find the difference between forward bearing and back bearing, calculate the mean discrepancy but failed to calculate correct forward and back bearing while others were able to find the difference between forward bearing and back bearing, calculate the mean discrepancy, calculate the correct forward but failed to calculate correct back bearing.

In part (b), some candidates were able to identify four sources of errors during the Compass Survey such as: *improper fixation of compass*, *inaccurate measurement* and *errors in booking the readings*. While others managed to identify four sources of errors during the Compass Survey without providing explanations. Extract 3.1 represents a candidate who performed well in this question.

### Extract 3.1

|    |    |  |
|----|----|--|
| 3. | a/ | $254^\circ - 70^\circ = 184^\circ$<br>Amount of error = $184^\circ - 180^\circ$<br>$= 4^\circ$<br><br>Mean error = $\frac{\text{amount of error}}{2}$<br><br>Mean error = $\frac{4}{2}$<br><br>Mean error = $2^\circ$<br><br>Less backbearing by mean error.<br>$254 - 2^\circ = 252^\circ$<br><br>Add mean error to forward bearing<br>$70^\circ + 2^\circ = 72^\circ$<br><br>$252^\circ - 72^\circ = 180^\circ$<br>$\therefore$ The Forward bearing should be $72^\circ$ and backbearing should be $252^\circ$ .   |
| 3. | b/ | i/ Presence of iron ore <sup>and metal</sup> around the area of survey can disrupt the readings of the compass.<br>ii/ The defect of the compass. Sometimes the compasses can be having problems, and thus give wrong reading.<br>iii/ Imperfection of the human eye, where as somebody mostly the surveyor sites an object wrongly. Or sometimes the surveyor may not see well the bearing, and can read them wrongly on the compass.<br>iv/ The negligence of the surveyor not to set the compass uprightly and in a stable manner upon a non metal tripod. A compass that is not cross checked to see if it is stable, can easily give or bring about wrong readings. |

Extract 3.1 is a sample of a candidate with good responses. He/she managed in part (a) to correct the discrepancy of these reading and in part (b) identify four sources of errors during the Compass Survey.

The candidates who scored from 5.5 to 8.5 marks partially addressed the demand of the question. For instance, in part (a) some candidates were able to find the discrepancy but failed to correct the readings. In part (b) some candidates were able to identify few sources of errors during the Compass Survey, while others mixed up relevant and irrelevant answers. Hence, the candidates' inability to focus on the demand of the question is an indication of partial knowledge and skills on the Simple Survey and Map Making especially on the concept of reading Prismatic Compass specifically on forward and back bearing and errors of closure and how to correct it. Hence, candidates' marks varied due to their responses.

The candidates who scored from 0.5 to 5 marks were not able to attempt the question correctly as they provided weak responses. For example, in part (a) some candidates failed to find the discrepancy hence were unable to get the corrected readings. In part (b) some candidates were able to identify a few sources of errors during the Compass Survey, while others mixed up relevant and irrelevant points.

A few candidates (2%) scored a 0 mark; these candidates were unable to score any part of the question. For example in part (a) they were not able to apply correct formula of correcting the discrepancy. For instance one candidate used this formula :error= $BB - FB \div 2$  then he/she get  $254^0 - 70^0 \div 2 = 92^0$  which is not the correct answer. Likewise in part (b) they failed to identify any sources of errors during compass survey. Extract 3.2 indicates part of a candidate's response with poor performance in this question.

### Extract 3.2

|   |   |  |
|---|---|--|
| 3 | Solution.   |  |
|   | Soln  |  |
|   | $FB = 070^\circ$  |  |
|   | $BB = 254^\circ$  |  |
|   |   |  |
|   | To find an error.   |  |
|   | $= BB - FB$   |  |
|   | $= 254^\circ - 070^\circ$   |  |
|   | $= \frac{184^\circ}{2}$   |  |
|   | $= 92^\circ$  |  |
|   | $\therefore$ Error is 92.   |  |
|   | then to correct the error the difference must be 0 or $180^\circ$ . |  |
|   | $= (BB - \text{Error}) - (FB + \text{Error})$                       |  |
|   | $=$   |  |
|   | $= (254^\circ - 92^\circ) - (070^\circ + 92^\circ)$                 |  |
|   | $= 162^\circ - 162^\circ$   |  |
|   | $= 0^\circ$   |  |
|   | Hence the error corrected.  |  |

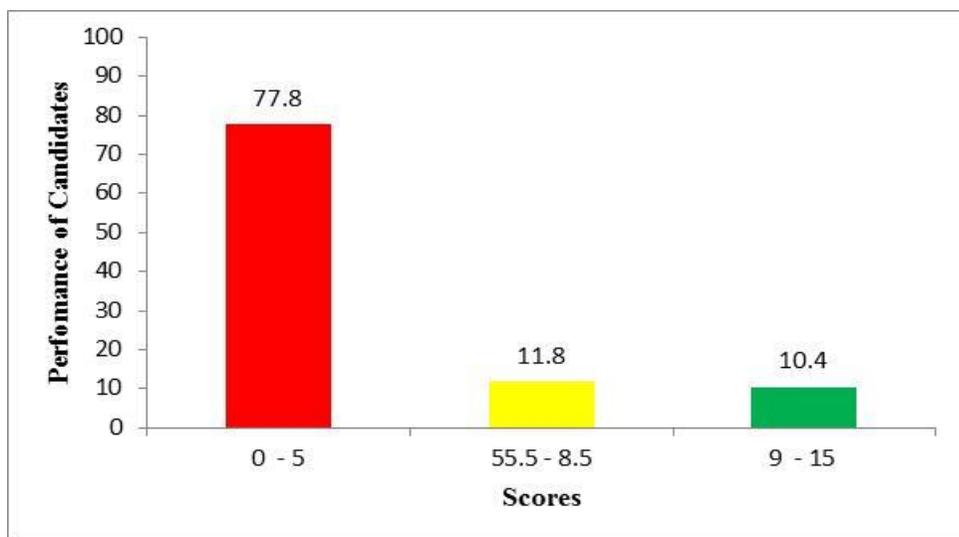
Extract 3.2 is a sample of a candidate with poor responses. He/she was not able correct the discrepancy of the reading and failed to identify four sources of errors during the compass survey.

#### 2.1.4 Question 4: Photograph Interpretation

This question had two parts, (a) and (b). In part (a) the candidates were required to calculate the photo distance provided that the map distance is 3 inches, map scale is 1:25,000 and photo scale is 1:18,750. In part (b) the

candidates were required to differentiate the following terms: (i) Principal point and focal length, (ii) Flying height and flight line and (iii) Datum and mosaic. Marks allocated for this question were 15.

This was the question which was opted for by very few (2.8 percent) candidates and the second poorly done question on Geography paper. Only 22.2 percent of the candidates scored 35 marks and above. The analysis shows that 21.4 percent of the candidates scored a 0 mark, 56.4 percent scored from 1 to 5 marks, 11.8 percent scored from 5.5 to 8.5 marks, 10.4 percent scored from 9 to 15 marks. Figure 4 below illustrates the performance.



**Figure 4:** Trend of Candidates' Performance in Question 4.

The candidates who scored a 0 mark (21.4%) were not able to score in any part of the question. These candidates could not understand the concept of photograph interpretation. For example in part (a) they failed to calculate the photo distance due to application of inappropriate formula, for instance one candidate used:

$$Photo\ distance = \frac{map\ scale \times photo\ distance}{map\ distance} \quad \text{instead of:}$$

$$Photoscale = \frac{photo\ distance}{ground\ distance}$$

Or

$$\textit{Photo distance} = \textit{photoscale} \times \textit{ground distsnce}$$

In part (b), they failed to differentiate all terms as used in the topic of photograph interpretation. Extract 4.1 is a sample of such a poor response.

**Extract 4.1**

|     |  |  |
|-----|--|--|
| 04: | (a) data given;  |  |
|     | map distance (M.d) = 3 inches = 7.62 cm.   |  |
|     | map scale (M.S) = 1:25000  |  |
|     | Photo scale (P.S) = 1:18750  |  |
|     | What; photo scale (P.S) = ?  |  |
|     | from;  |  |
|     | $\frac{M.S}{P.S} = \frac{m.d}{p.d}$  |  |
|     | $(P.S) \times (m.d) = (M.S) \times (p.d)$  |  |
|     | $\Rightarrow P.S = \frac{(M.S) \times (p.d)}{m.d}$   |  |
|     | $P.S = \frac{1}{25000} \times \frac{1}{18750}$   |  |
|     | $P.S = \frac{7.62}{279.96 \times 10^{12} \text{ cm}}$  |  |
|     | $= 2.7996 \times 10^{13} \text{ cm}$   |  |
|     | $= 2.7996 \times 10^{13} \text{ m}$  |  |
|     | $\therefore$ Photo scale = 1:279.96x10 <sup>12</sup>   |  |
|     | (b) i) Principal point is the distance of an object from the observer before the picture was taken |  |
|     | while  |  |
|     | power  |  |
|     | Focal length is the length of the camera to take a picture at a certain distance.                  |  |
|     | ii) Flying height - distance required by a moving plane to travel during its destination           |  |
|     | while;   |  |
|     | Flight line - line that allow the the plane to fly   |  |
|     | iii) Datum is the prular of the word data  |  |
|     | while  |  |
|     | Mosaic is the word that describe the   |  |

Extract 4.1 indicates a sample of the candidate who did not manage to calculate the photo distance and differentiate some photographic terms given.

The candidates who scored from 1 to 5 marks managed to answer correctly in some parts of the question. For instance, in part (a) some candidates managed to write correct formula such as  $Photoscale = \frac{photo\ distance}{ground\ distance}$  a part from writing the correct formula they failed to calculate the ground distance which was not given in the question.

In part (b), some candidates managed to differentiate correctly a few terms. For example, some managed to write only in roman (i) *Principal point is the geometrical Centre which is located at the point of intersection of the two diagonal lines from the corners of the air photograph and focal length is the perpendicular distance from camera lens to the film.* In roman (ii) and (iii) they were able to attempt one part of the question by giving correct definitions, these terms are *flying height* and *Datum*.

The candidates who scored from 5.5 to 8.5 marks were able to score well in one part of the question or in the second part. For example in part (a) they managed to write the formula of calculating photo distance and were able to get the correct answer: Photo distance = 4 inches. In part (b) some candidates were able to differentiate some of the photographic terms provided: (i) Principal point and focal length, (ii) Flying height and flight line and (iii) Datum and mosaic while others provided partial responses (i) Principal point and focal length, (ii) Flying height and flight line and (iii) Datum and mosaic. Such inadequate responses adversely affected the candidates' performance. Hence, they were not able to score above 8.5 marks.

The candidates who scored from 9 to 15 marks showed understanding on the Photograph Interpretation especially on how the scale of the photographs is determined, types of information from the photographs and how to extract and interpret information present in the photograph. For example, in part (a) they were able to use correct formula and procedures to get the correct answer, in the first place they identified the ground distance which was not given in the equation since

$$\text{Photoscale} = \frac{\text{photo distance}}{\text{ground distance}}. \quad \text{Ground distance} = 75,000 \text{ inches.}$$

$$\text{Photo distance} = \frac{75,000 \text{ inches} \times 1 \text{ inch}}{18,750 \text{ inches}}$$

From the given formula they managed to obtain the correct answer which was: *Photo distance = 4 inches*. In part (b) some candidates were able to differentiate all terms as the question demanded: (i) *Principal point* and *focal length*, (ii) *Flying height* and *flight line* and (iii) *Datum* and *mosaic* while others differentiated (i) *Principal point* and *focal length*, (ii) *Flying height* and *flight line* and (iii) *Datum* and *mosaic* partially. The marks differed because of deviation in accurateness of their responses. Extract 4.2 is an example of a candidate who had good performance in the question.

Extract 4.2

|   |  |  |
|---|--|--|
| 4 | <p>             a) data given<br/>             map distance = 3 inches<br/>             map scale = 1: 25000<br/>             photo scale = 1: 18750           </p> $\text{map scale} = \frac{\text{distance on map}}{\text{distance on ground}}$ $\text{ground distance} = \frac{\text{map distance}}{\text{map scale}}$ $G.D = \frac{3}{1/25000}$ $\text{ground distance} = 3 \div \frac{1}{25000}$ $= \frac{3 \times 25000}{1}$ $\text{ground distance} = 75000 \text{ inches}$ $\text{true photo scale} = \frac{\text{photo distance}}{\text{ground distance}}$ $\text{photo distance} = \text{photo scale} \times \text{ground distance}$ $= \frac{1}{18750} \times 75000 \text{ inches}$ $= \frac{75000}{18750}$ $\text{photo distance} = 4 \text{ inches}$ <p>the distance of photo = 4 inches.</p> |  |
|---|--|--|

|   |  |  |
|---|--|--|
| 4 | <p>(i) Principle point is the area (point) in the ground where the camera is focused, it indicates targeted area where of the photographer. While focal length is the distance from the camera axis to the film. the focal focal length is expressed in millimetre, and is used in determining the scale of photograph.</p>  |  |
|   | <p>(ii) Flying height is the distance from the ground to the camera axis (lens). flying height normally is obtained in the vertical photograph where picture is taken from camera in aircraft. While flying line is the point (line) of the aircraft that take picture pass, during photograph taking. flying line have a uniform distance from the ground.</p>  |  |
|   | <p>(iii) Datum is the mean sea level. datum indicate the elevated part of the ground which rise up. Mean sea level (datum) is important in photograph since indicate original position. While mosaic is the overlapping area which occur during the process of taking picture. this occur when the same area is indicated in more than one picture. Overlapping (mosaic) is important in producing the complete image.</p> |  |

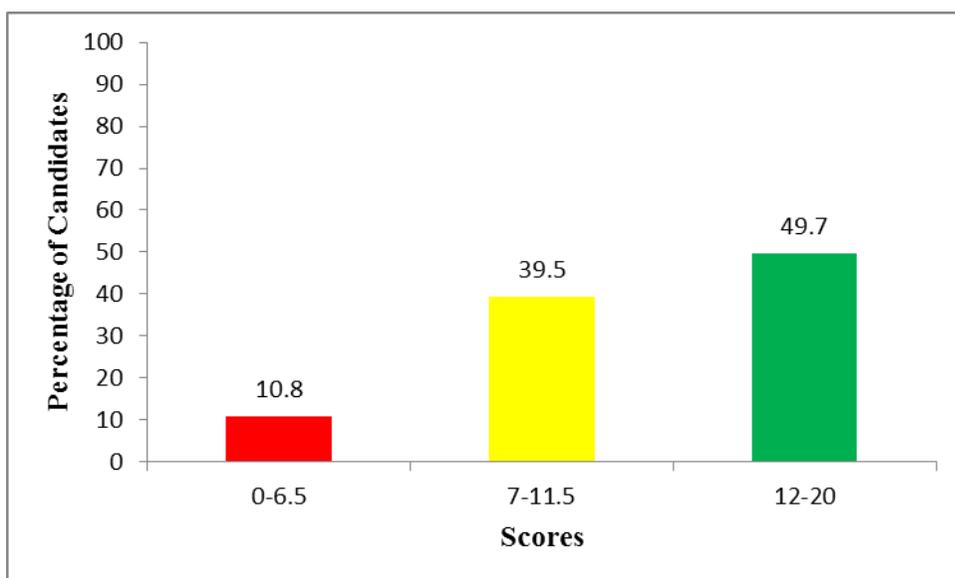
Extract 4.2 represents a candidate who performed well in this question. He/she managed in part to (a) calculate the photo distance. In part (b) differentiated the given photographic terms given.

## SECTION B: PHYSICAL GEOGRAPHY

### 2.1.5 Question 5: Water Masses

This question required the candidates to discuss by giving eight points on the statement that "Wetlands are not Wastelands". The total marks allocated for this question were 20.

The majority of the candidates (81.8 percent) opted for this question and their general performance was good as 89.2 percent scored 35 marks and above. Data in this question show that 49.7 percent scored from 12 to 20 marks, 39.5 percent scored from 7 to 11.5 marks, 10.3 percent scored from 0.5 to 6.5 marks and 0.5 percent scored a 0 mark. Figure 5 below illustrates the performance.



**Figure 5:** Trend of Candidates' Performance in Question 5.

The candidates who scored from 12 to 20 marks had shown ability to comprehend and apply knowledge in new situations, because the question needed high level of analytical and reasoning skills. Majority of candidates showed a clear understanding on the concept of Water Masses especially on the functions and importance of Wetlands to the environment and life. These candidates understood the demand of the question and therefore, in their responses they managed to provide clear meaning of wet land and

waste land and provided a functions of wetland such as: *support arable farming, habitat provision, flood control* and *support livestock farming* and they provided good conclusion on how to conserve Wetlands. Variation of marks were influenced by arguments which were provided by the candidates. Extract 5.1 is an example a candidate with a good performance.

## Extract 5.1

|   |  |  |
|---|--|--|
| 5 | <p>Wetland are areas that are covered by water either temporary or permanently. Example of wetlands are estuarine wetland, bogs, swamps. Wetlands are not wastelands because they contain various resources that can be extracted for usefulness. The resources found are for example minerals, water bodies, forests, different rocks and pasture.</p>  |  |
|   | <p>The following is how wetlands are not waste land,</p>   |  |
|   | <p>Forest as a resource can be utilized to produce timber that is used for construction, building and used in the manufacturing industries to produce chairs, tables for human use. Also forest acts as an agent that helps in rain formation. It also helps to protect the soil for further erosion and increase soil fertility around the wetland. Also forest resources like honey can be used as food for the surrounding.</p> |  |
|   | <p>Fishing activities can take place in the wetland such as in swamps and ponds and in the water bodies like oceans. For example Kunduchi is a wetland area people fish from the Indian Ocean and obtain fish for well and personal use and leading to development of fishing industries.</p>  |  |
|   | <p>Wetland promotes Tourism especially around the coast where different features can be formed due to the work of marine agents like wave, current and tidal. Also wetland can influence the growth of coral forming coral reefs.</p>  |  |

|  |  |
|--|--|
| that facilitate tourism activities and thus increase in government revenue.  |  |
| <p>Minning activities due to presence of minerals around wetlands. And due to this people are employed and increase in both living standard and government revenue, minerals such as iron, saltstone and Copper can be found around wetland. Also presence of coral reefs that are mined for cement production and construction. forexample at the coast of yemen.</p> |  |
| <p>Wetland provides materials such as gravel, boulders and rocks that are used in construction and building industries forexample at the coast due to the influence of deposition by marine agents like Current, tidal and waves, also due to presence of Corals.</p>  |  |
| <p>Wetlands have been facing problems that leads to its degradation such as over cultivation, overgrazing, poor waste disposal excessive cutting down of trees. Such problems can be curbed by strict laws and policies by the government toward protecting wet lands.</p>   |  |

Extract 5.1 is a sample of a response from a candidate with an ability to comprehend and apply knowledge in new situations. The candidate was able to provide good introduction, explain the importance of wetlands and his/her conclusion shows high level of critical analysis.

Furthermore, the candidates who scored from 7 to 11.5 marks were able to provide a few points on the functions of wet land contrary to the question demand. For example, some candidates were able to give the introduction of Wetlands and Wastelands but explained functions of Wetlands partially and suggested methods of conserving Wetlands, some candidates failed to provide the introduction of Wetlands and Wastelands but managed to explain eight functions of Wetlands and possible ways of conserving it while others gave partial introduction and managed to provide eight functions of Wetlands correctly but failed to suggest ways of conserving it. Such responses led their marks to vary.

Moreover, the candidates who scored from 0.5 to 6.5 marks showed that they were not competent on the topic of Water Masses especially on the Wetlands specifically on the functions and importance of Wetlands to the environment and life. That is why they scored lower marks. For instance, some candidates failed to provide the introduction of Wetlands and Wastelands, explained a few functions of Wetlands and failed to give ways of conserving Wetlands, some provided an introduction of Wetlands and Wastelands partially, mentioned functions of wetlands without explanations and did not suggest ways of conserving it while others were able to explain only few functions of Wetlands partially without an introduction of Wetlands and Wastelands and possible ways of conserving it. These responses caused the candidates to vary in their marks.

On the other hand, the candidates who scored a 0 mark lacked knowledge and skills on the subject matter of the functions and importance of Wetlands to the environment and life. In this category candidates were not able to provide the introduction of Wetlands and Wastelands, functions of Wetlands and ways of conserving Wetlands with relevant conclusion. For example, one candidate misconceived the question by explaining ways of conserving Wetlands such as: *proper ways of dumping wastes, establishment of government policy and provision of education* instead of functions of Wetlands. This candidate probably was attracted by the word Wastelands without considering the demand of the question. Another one explained the types of underground water such as: *springs, wells, and geysers*. Probably he/she was not aware of the concept of Wetlands specifically on the functions and importance of Wetlands to the

environment and life. This situation rendered them not to score any mark. Extract 5.2 is a sample of an irrelevant response.

**Extract 5.2**

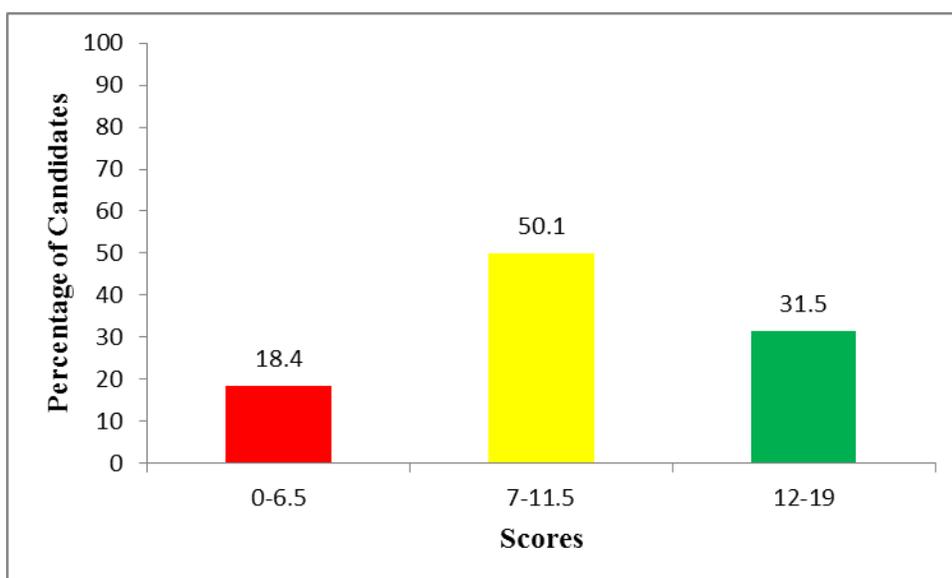
|   |  |  |
|---|--|--|
| 5 | <p>Wetlands are not wastelands. The statement means wetland areas are not places where all kinds of wastes can be disposed; therefore the following are measures taken to preserve wetlands :-</p> <p>Proper area for waste disposal. There should be a good area to where all the wastes has to be disposed and not to the wetland areas. This can help also in avoiding the transmission of diseases.</p> <p>There should be government policy; Also government policy should be kept there so as wetland areas can be preserved and managed by all people.</p> <p>Provision of Education on the importance of conserving the environment to all people because wetlands are areas that can bring up national income when are conserved well and maintained because can be attractive areas for tourism activities to take place</p> |  |
|---|--|--|

Extract 5.2 is a sample of a poor response. The candidate explained ways of conserving Wetlands such as: proper way of dumping wastes, establishment of government policy and provision of education instead of importance of Wetlands.

## 2.1.6 Question 6: Water Masses

This question instructed the candidates to explain with the aid of the diagrams any five types of depressions in which lakes are formed. The question had 20 marks.

This question was opted for by 58.9 percent of the candidates of which 31.5 percent scored from 12 to 19 marks, 50.1 scored from 7 to 11.5 marks, 18.2 percent scored from 0.5 to 6.5 marks and 0.2 percent scored a 0 mark. The general performance was good as 81.6 percent scored 35 marks and above Figure 6 below illustrates the performance in this question.

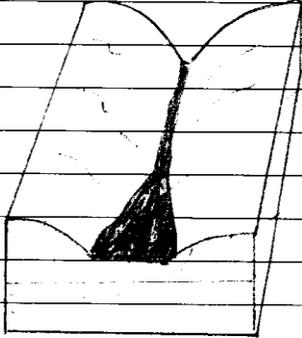


**Figure 6:** Trend of Candidates' Performance in Question 6.

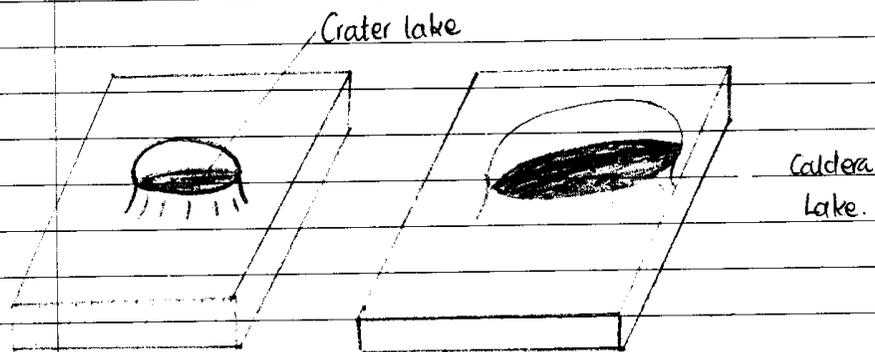
The candidates who scored from 12 to 19 marks revealed that they had good knowledge and skills on the concept of Water Masses especially on the formation and origin of lakes. Variation of marks was due to strengths and weaknesses in their responses. For example, some candidates were able to give clear introduction of lakes, identified correct types of depressions in which lakes are formed as: *crustal warping depression*, *tectonic movement depression*, *volcanic action depression* and *glacial action depression* and managed to provide a conclusion. Some were able to provide a partial introduction, explained correctly the types of depressions in which lakes are

formed without a conclusion, Others managed to give a correct introduction of lakes, and a few types of depressions had satisfactory explanations. Extract 6.1 is a sample of a candidate who answered the question relatively well.

## Extract 6.1

|    |  |
|----|--|
| 6. | Lakes are hollows or depressions on the earth's                                    |
|    | surface which are occupied by water. There are many lakes found in                 |
|    | East Africa like Lake Victoria, Lake Nyasa, Lake Shilo, Lake Turkana.              |
|    | All these are a result of depressions formed due to various                        |
|    | geomorphological processes on the earth's surface.                                 |
|    | Depression can be as a result of earth movement due                                |
|    | to faulting, volcanic eruptions and also erosion. The following are                |
|    | depressions formed due to faulting:  |
|    | Rift Valley Lakes. A rift valley is a long wide depression                         |
|    | formed as a result of faulting with steep sides called                             |
|    | escarpments. Water occupies the base of the depression or valley                   |
|    | and hence, results to the formation of a rift valley lake. A rift                  |
|    | valley is formed as a result of compressional forces resulting to a                |
|    | depression. For example; Rift Valley lakes include; Lake Tanganyika                |
|    | and Lake Nyasa in Tanzania, Lake Turkana in Kenya.                                 |
|    |  |
|    | A rift valley lake.  |
|    | There are also lakes formed due to volcanic eruptions;                             |
|    | Crater and Caldera lakes. These are lakes formed as                                |
|    | a result of extensive volcanic activities onto the earth's surface                 |
|    | leading to depressions known as crater and caldera. A crater is                    |
|    | formed when violent eruptions through the vent, expul the plug dome                |
|    | which was once formed, leading a small hollow or depression at                     |
|    | the summit of the cone. This results to the formation of a crater lake             |

When water occupies in the depression. When the depression formed at the summit is much wider and larger; and water later on occupies at the depression; results to the formation of a caldera lake. Example; Lake Shilo in Ethiopia is the largest caldera lake in the world.



There are also lake formed due to glacial erosion; Cirque lake. It's also known as Corrie lake; It's formed when water occupies in this glacial erosional feature formed in the highland called a cirque or corrie; which is an arm-chair-like depressional/hollow structure; due to the, erovive activity of water/ice. Example of cirque. lakev include. Lake Teleki in Kenya.



Cirque/Corrie lake.

Extract 6.1 represents part of a candidate's response who managed to provide a definition of a lake and explain correctly types of depressions in which lakes are formed.

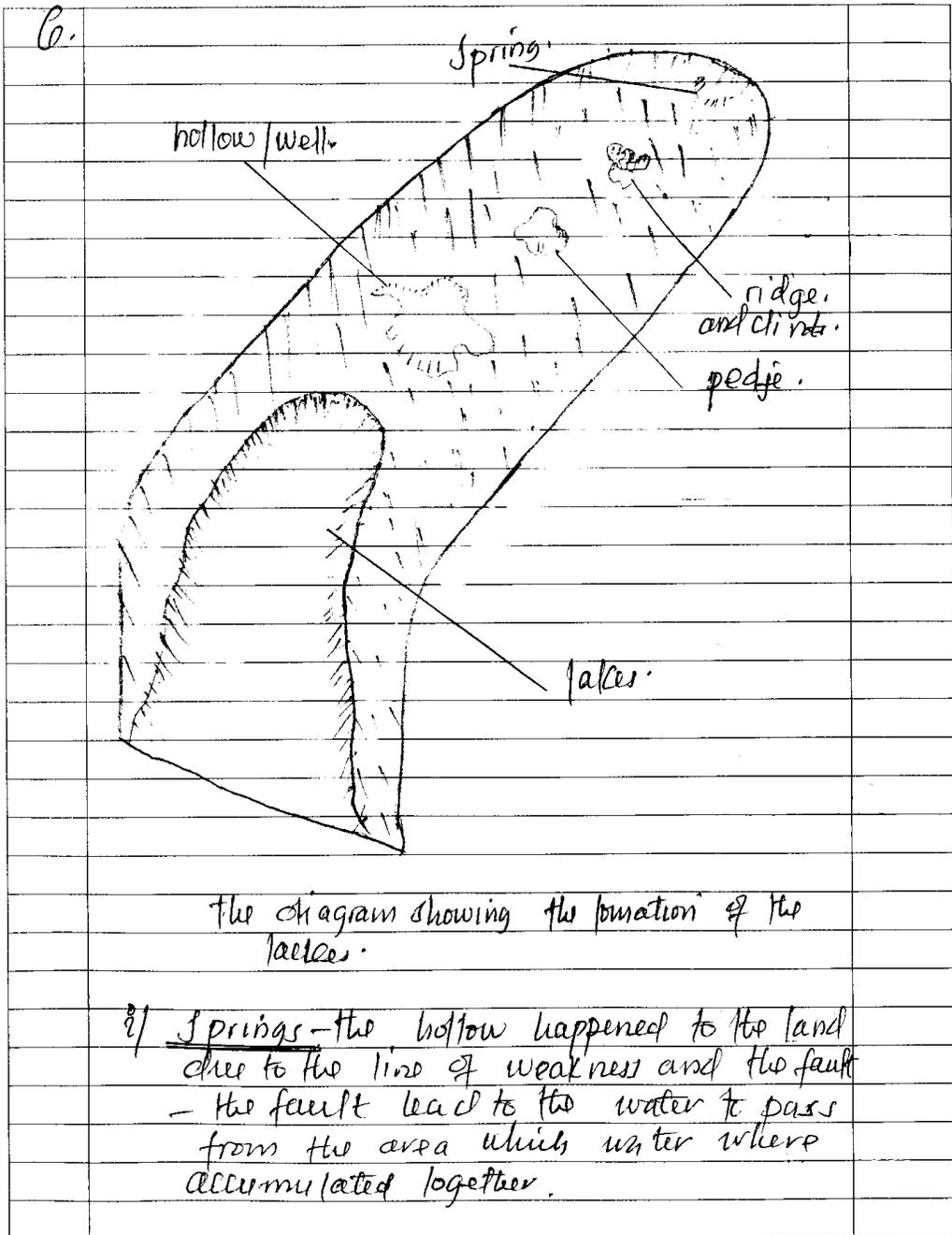
Furthermore, the candidates who scored from 7 to 11.5 marks at least showed understanding of Water Masses especially on the concepts of the formation and origin of lakes. Their marks varied because of differences in the quality of their arguments. For example some candidates were able to give introduction of lakes but provided partial explanations on the types of

depressions in which lakes are formed with correct conclusion. Some were able to provide partial introduction, few correct types of depressions in which lakes are formed and a conclusion while others did not manage to give an introduction of lakes but were able to explain the types of depressions in which lakes are formed and a conclusion.

Moreover, the candidates who scored from 0.5 to 6.5 marks were able to provide correct introduction of lakes but did not manage to explain any type of depression in which lakes are formed, some candidates were not able to give introduction of lakes but were able to explain only few types of depressions in which lakes are formed. While some candidates were able to give partial introduction of lakes without explaining any type of depression in which lakes are formed. Variation of marks depended on the strength of their responses.

On the other hand, the candidates who scored a 0 mark had no knowledge and skills on Water Masses especially on the concept of formation and origin of lakes. Some candidates provided irrelevant introduction and types of depressions in which lakes are formed. For example, one candidate provided an introduction of depressions as: *hollow in a land surface which may be surrounded by hills or mountains*. This candidate failed to differentiate between an empty hole and the hole which is filled with water. He/she explained the importance of the lakes such as: *irrigation* and *fishing* instead of types of depressions in which lakes are formed, this candidate failed to interpret the demand of the question. Another candidate explained theories which explain the formation of landforms such as: *continental drift*, *isostasy theory* and *plate tectonic theory*. Probably he/she was not able to identify the contribution of these theories to the formation of different depressions in which lakes are formed. Extract 6.2 is a sample of poor responses.

Extract 6.2



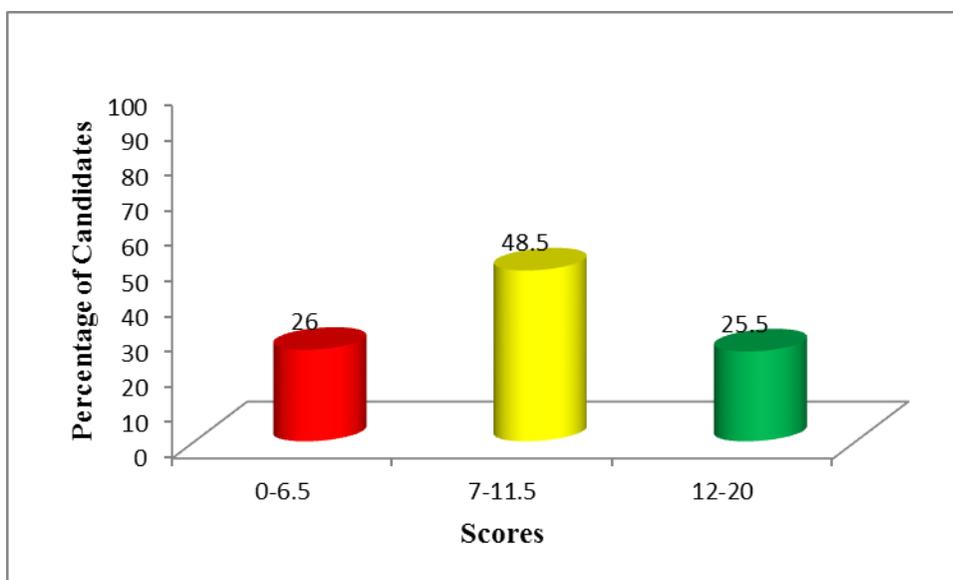
|      |  |
|------|--|
| 6    | <p>The springs they are in form of small holes that water are passing.</p> <p>- the springs lead to the formation of ridge.</p>  |
| ii)  | <p><u>Ridge</u> - the developed springs that due to the type of raw found to land where the line of weakness is. the fault.</p> <p>- The Ridge is then lead to the formation of the D.D.H.</p>   |
| iii) | <p><u>Pedje</u> - the developed ridge from the 3 springs that can occur on the earth surface. In large area are shown. The pedje lead to enlarged hollow like well.</p>  |
| iv)  | <p><u>Hollow/well</u> like structure is occurrence when the amount of water occupied is very large is number this is due to <del>typical</del> to rock the weathering cause the smooth or slowly to form the lake.</p>                 |
| v)   | <p><u>Lake</u> - the hollow like feature that occur on the land that started through the springs and then lead to water to accumulate together.</p> <p>Lake is formed when type of rock is either hard or smooth faultlike faster.</p> |

Extract 6.2 represents a sample of a candidate who responded on the theories which explain the formation of landforms such as: ridge, pedje, hollow/well, lakes and springs instead of types of depressions in which lakes are formed.

### 2.1.7 Question 7: Space Dynamic

In this question the candidates were required to discuss eight factors that influence the variation in the amount of insolation received on the earth surface. The total marks allocated for this question were 20.

The majority of the candidates (86.5 percent) opted for this question and their general performance was good as 74 percent scored 35 marks and above. Analysis in this question shows that 25.5 percent scored from 12 to 20 marks, 48.5 percent scored from 7 to 11.5 marks, 25 percent scored from 0.5 to 6.5 marks and 1.0 percent scored a 0 mark. Figure 7 below illustrates the performance.



**Figure 7:** Trend of Candidates' Performance in Question 7.

The candidates who scored from 12 to 20 marks had enough knowledge on the topic of Space Dynamic especially on the concept of climatic change specifically on the factors influencing temperature on the earth. Despite the fact that candidates scored higher marks, their marks varied due to the strengths and weaknesses of their points. For instance, some candidates were able to give a correct introduction of insolation, they provided eight factors that influence the variation in the amount of insolation received on the earth surfaces: *solar attitude, distance from the sun, the effect of the*

*atmosphere, latitudinal position and nature of the surface.* Some managed to provide a correct introduction of insolation, eight factors that influence the variation in the amount of insolation received on the earth surface but failed to give relevant conclusion. Some managed to provide partial introduction of insolation, correct eight factors that influence the variation in the amount of insolation received on the earth surface and a conclusion while others were not able to provide a correct introduction but they managed to explain eight factors that influence the variation in the amount of insolation received on the earth and a conclusion. Extract 7.1 is a sample of such good performance.

## Extract 7.1

|    |   |  |
|----|---|--|
| 7. | <p>Insoleation refers to the amount of energy generated from the sun to the earth's surface. This amount of energy generated from the sun tend to vary from place to place and from time to time. There are number of factors which cause the variation on the amount of this insolation or solar radiation to reach on the earth's surface, it include solar input, solar altitude, the influence of the atmosphere, length of the day, distance from the sun, latitudinal location, nature of the surface and elevation and aspect.</p> |  |
|    | <p>These factors influences variations of the amount of insolation or solar radiation received on the earth's surface as follows.</p>   |  |
|    | <p>Solar input, this refers to the amount of solar radiation emitted from the sun. If the amount of rays or radiation emitted are at high intensity the amount of insolation on the earth's surface will be high but if the amount of solar radiation emitted from the sun are low also the amount of energy that will be received on the earth's surface will be at low amount</p>   |  |

|   |   |  |
|---|---|--|
| 7 | <p>The effect of the atmosphere.</p> <p>The atmosphere affect or causes variation on the amount of insolation to the earth's surface through three ways like follows, first is through absorption within the atmosphere there is clouds, water vapour, dust particles and different gases which tend to absorb the amount of insolation from the sun. Second is reflection, the atmosphere tends to reflect back the solar radiation and cause little of them to reach the earth's surface. and third is through scattering not all the solar radiation from the sun reaches the earth's surface some are being scattered to different places in the atmosphere.</p> <p>Nature of the surface: Also the amount of insolation on the earth's surface is affected by the nature of the land surface, on the nature of the surface normally we consider Albedo and the specific heat capacity of the surface. normally white and shiny surface tends to reflect the solar radiation back to the atmosphere, while black surface tend to absorb more solar radiation from the sun and cause the ground surface to have high heat compared to white and shiny surface.</p> |  |
|---|---|--|

|        |  |  |
|--------|--|--|
| 7 cont | <p>Latitudinal Location, also the amount of insolation on the earth's surface varies with the latitudinal location, example the areas which are very near to the equator tends to receive much insolation due to the fact that they are very close to the Sun while the areas which are at the poles or far away from the equator tends to receive little insolation because the solar radiation travels at long distance towards the poles.</p> <p>Distance of the Sun from the earth, also the amount of insolation on the earth's tends to vary due to the variation in the distance of the sun from the earth, example during perihelion on 3<sup>rd</sup> January of each year the sun is very close to the earth's more insolation are being received on the earth's surface is high while during aphelion when the sun is very faraway from the earth the amount of insolation received on the earth's surface is very low because the solar radiations travel at long distance towards the earth's surface</p> |  |
|--------|--|--|

length of the day. The amount of insolation received on the earth's surface also tends to vary due to the length of the day, normally when the day is longer than night much insolation is being received on the earth's surface but when the night is longer than the day the amount of insolation tends to be low because during the day more energy is being generated from the sun than during the night thus cause variation on the amount of insolation received on the earth's surface.

Solar altitude, also the insolation received on the earth's surface are affected by altitude of the sun from the earth's surface, example during evening and morning the solar altitude is high thus cause the solar radiation to travel longer distance to reach the earth's surface thus little insolation are being received while during the noon the sun is at low distance thus the solar radiation travels shorter distance to the earth's surface thus cause much insolation to be received on the earth's surface during the noon than during the evening and morning time

|  |   |  |
|--|---|--|
|  | <p>Elevation and aspect, also the amount of insolation received on the earth's surface tends to varies from place to place due to elevation of different surface and the nature of the slope on earth's surface, example the amount of insolation received on the Kilimanjaro mountains in Tanzania is higher at the southern slope than the northern slope facing Kenya thus lead to variation of insolation on that mountain.</p> <p>Generally the amount of insolation received on the earth's surface has variety of function on the earth's surface, for example it support plant growth through photosynthesis process, tends to warm the ocean water, it cools the ground, it support rain formation on the atmosphere, also it cause rise of the sealevel due to melting of ice it also support life of all living organisms including human being.</p> |  |
|--|---|--|

Extract 7.1 is a sample of a good response of a candidate who was able to give relevant introduction of insolation and discuss eight factors that influence the variation in the amount of insolation received on the earth surface with relevant conclusion.

Furthermore, the candidates who scored from 7 to 11.5 marks indicated that they had little knowledge on Space Dynamic. For example, some candidates were able to give a correct introduction of insolation, explained eight factors that influence the variation in the amount of insolation

received on the earth surface partially and a relevant conclusion. Some managed to give an introduction of insolation, explain a few factors that influence the variation in the amount of insolation received on the earth surface and provided correct conclusion while others provided partial introduction of insolation and explained partially eight factors that influence the variation in the amount of insolation received on the earth surface without a conclusion.

Similarly, the candidates who scored from 0.5 to 6.5 marks had little knowledge on the Space Dynamic especially on the concept of climate change specifically on the factors influencing the amount of insolation received on the earth surface. Their varied responses led to differences of marks awarded. For example, some candidates were able to provide correct introduction of insolation but were not able to explain factors asked and provided an irrelevant conclusion. Some were able to give an introduction only but failed to explain factors and a relevant conclusion while others were not able to provide an introduction of insolation but managed to explain partially a few factors that influence the variation in the amount of insolation received on the earth surface without a conclusion.

On the other hand the candidates who scored a 0 mark failed to understand the demand of the question as they provided an irrelevant introduction of insolation, factors that influence the variation in the amount of insolation received on the earth surface and irrelevant conclusion. For example, one candidate explained only ways in which the sun's rays reaches the earth and warms the surface such as: *convection*, *conduction* and *radiation*. The reason for this confusion might be that, factors that influence the variation in the amount of insolation received on the earth surface and ways in which the sun's rays reaches the earth surface are both taught in the subtopic of climate change. Another candidate explained factors affecting temperature like: *distance from the sea*, *altitude*, *latitude*, *cloud cover* and *ocean current* instead of factors that influence the variation in the amount of insolation received on the earth surface. Since "Insolation" refers to the energy from the sun and "temperature" is the degree of hotness or coldness, the candidate failed to differentiate between temperature and energy from the sun as they are both related to hotness or coldness. Extract 7.2 is a sample of a poor response.

**Extract 7.2**

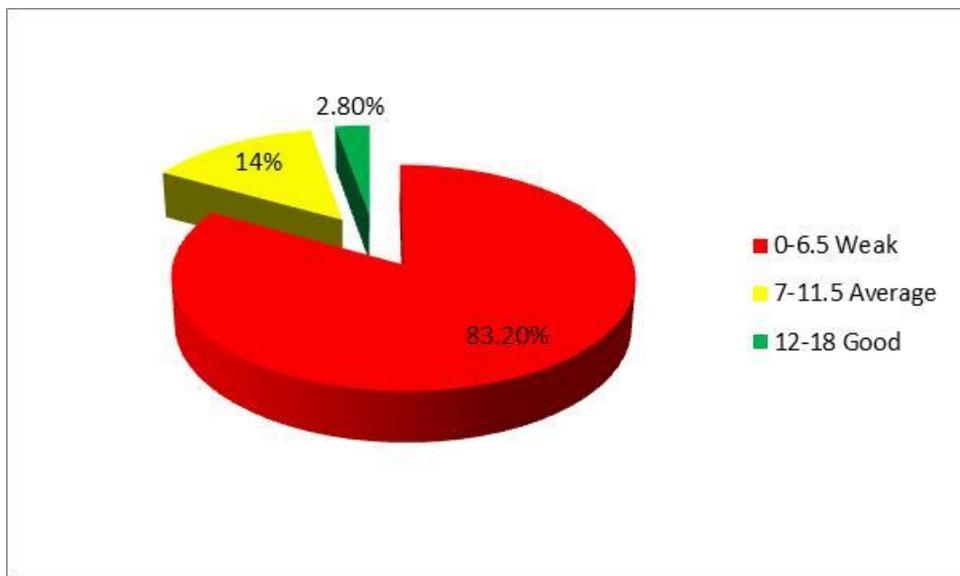
|   |  |
|---|--|
| 7 | <p>Insolation: Refer to an increase height height with an decrease of altitude above the means sea level, so due to that the amount of insolation which received on Earth surface may be influence by different factors so the following are the amount factor influence amount of insolation received on the surface as follows.</p> <p>Distance from the sea: Although that the amount of insolation may be influence due to the distance of the sea from sea to the surface are that when you go above the mountain temperature decrease at <math>0.6^{\circ}\text{C}</math> due to that thing.</p> <p>Altitude: Also through that can influence the amount of insolation which are received on the Earth surface so due to that have that to occur.</p> <p>Latitude: Also those are the lines that are drawn on the Earth surface so due to that also they can influence the amount of the factors for insolation in the Earth surface.</p> <p>Cloud cover: Also through that is the one of the factor that influence the amount of insolation which are received on the Earth surface, so due to that issue that there will be different in variation in one area and another.</p> <p>Oceanic current: Also through that can influence the variation of amount of insolation received on the surface. That there is variation in one place to another so due to that can influence those factor to occur.</p> |
|---|--|

Extract 7.2 is a sample of a poor candidate’s response. The candidate explained factors affecting temperature like: distance from the sea, altitude, latitude, cloud cover and ocean current, instead of factors that influence the variation in the amount of insolation received on the earth surface.

### 2.1.8 Question 8: Space Dynamic

This question instructed the candidates to discuss six theories which account for climatic change. The total marks allocated for this question were 20.

The question was not popular, as only 17.2 percent of the candidates attempted it of which 15.7 percent scored a 0 mark, 67.5 percent scored from 0.5 to 6.5 marks, 14.0 percent scored from 7 to 11.5 marks and 2.8 percent scored from 12 to 18 marks. The general performance in this question was very weak since only 16.8 percent scored 35 marks and above. Figure 8 below illustrates the performance.



**Figure 8:** Trend of Candidates' Performance in Question 8

Most of the candidates who scored a 0 mark had limited theoretical background on climatic change, misinterpreted the question, and their answers were too general and sketchy. For example, some candidates provided types of temperature inversion such as: *subsidence inversion*, some explained factors for climate change such as: *aspects* and *latitude* while others explained types of climate like: *tropical climate* and *equatorial climate*. Other candidates responded by providing factors which influence temperature of the area; one candidate for example went astray by

providing points such as: *theory of latitude*, *distance from the sea theory* and *altitude theory*. Extract 8.1 indicates one of the poor responses.

### Extract 8.1

|   |   |  |
|---|---|--|
| 8 | <p>Climate change is the change degree of temperature to low stage to high stage or to high stage to high low stage. Climate they are contain wind, temperature and living organism like plant and animals. The following are the theories which account for climate change.</p> <p>Distance from the sea theory, such that this are the theory that support change climate of the earth surface. the are which behind the sea temperature is very high and the area are not behind is the sea temperature is low. such that are the source of change in climate. Also are the theories which can account for climate change.</p> <p>Altitude theory, these are the theories that support the the climate change, because the area are high mountain temperature will be high and the area will be low mountain the temperature will be</p> |  |
|---|---|--|

5. low such that are the theories which account for climate change.

Vegetation cover theories, such that are the theories of climate change, also the area of high vegetation covered temperature will be high and the area are not temper vegetation the temperature will be low. such that are the theories which account for climate change.

Length of day, such that are the theories that support the climate change. because the day will be length the temperature will be change and the wind will be change and other factor. also are support the climate change because they day are length or short. such that are the theories which account for climate change.

Ocean current theory, such that are the theories which account for climate change. climate will be change in the area of oceanic current the area will be contain ocean current the climate will be change. and the area are not etc ocean current the climate will be change.

Latitude theory, such that the latitude are the source of change climate because the latitude to another latitude the climate will be change because the one latitude and another latitude the temperature will be increase at 0.6°C but are the cause the change of temp climate. such that are the theories which can account for climate

Extract 8.1 is a sample of a candidate who misunderstood the question thus responded by providing theories that influence temperature of the area, instead of theories for climatic change. He/she provided wrong responses such as: Latitude theory, ocean current theory, altitude theory and distance from the sea theory.

Similarly, the candidates who scored from 0.5 to 6.5 marks had superficial knowledge of the theories which account for climatic change. Their responses showed that the subject matter was not so clear to them specifically on the approaches or principles used in classifying climate. For example, some candidates were able to give a definition of climatic change in the introduction and explained partially few theories for climatic change without a conclusion. Some managed to explain only a few theories for climatic change without an introduction and conclusion, while others were able to give relevant introduction of climatic change only but failed to explain theories for climatic change and a conclusion.

Furthermore, the candidates who scored from 7 to 11.5 marks had moderate knowledge and skills in this question. For example, some candidates were able to provide relevant introduction of climatic change and explain partially the six theories for climatic change, while others gave partial introduction of climatic change and explained a few theories for climatic change and partial conclusion. Similarly others failed to provide a meaning of climatic change but managed to explain a few theories for climatic change. Therefore, the average score is a reflection of their relatively moderate knowledge of the topic of space dynamics

On the other hand, the candidates who scored from 12 to 18 marks were able to provide correct introduction of climatic change and explain six theories which account for climatic change such as: *variation in the solar energy theory*, *astronomical relationship between the sun and the earth theory*, *change in oceanic theory* and *volcanic activity theory* and they provided relevant conclusions. Some candidates defined climatic change in the introduction and explained six theories without a conclusion while others failed to define climatic change in the introduction but managed to expound six theories and a conclusion. Others gave partial introduction but managed to explain six theories and provided a relevant conclusion. Extract 8.2 is an example of a candidate with a good response.

## Extract 8.2

|    |   |  |
|----|---|--|
| 8. | <p>Climate change involves the decrease and increase of various climatic elements that causes the area to experience different climatic conditions from the ones experienced before. The main element is temperature. The climate change may be influenced by both natural factors as well as physical factors on the earth's surface, such as industrial activities. This could have been explaining climate change in wet areas whereby wet areas' temperatures have been increasing. The following are the theories that account for climatic changes:</p> <p><b>Continental drift theory.</b> The theory mainly relates climate change and the shifting of the landmass of earth's surface. The former large mass Pangaea was split to various continents that were pushed to areas characterized by different climatic conditions, thus this largely contributed to changes in climate of such areas. For instance, arctic that was pushed to polar region started experiencing the cold climatic condition with glacial formation, thus this tends to explain how continental drifting has caused the climate of most of the area to keep changing for longer periods of time.</p> <p><b>Arrhenius theory.</b> This theory also accounts for climatic changes in a manner that, it explains about the atmospheric composition whereby, when carbon dioxide and other gases in the atmosphere decrease or increase may lead to decrease or increase of global temperature. The theory suggests that the decrease in carbon dioxide due to consumption by large trees may lead to lowering of temperatures of some areas due to fact that carbon dioxide tends to scatter the heat from sun; thus increase in carbon dioxide also causes an increase in temperature as after emission from industrial gases deplete ozone layer, thus leads to climate change.</p> <p><b>Volcanicity theory</b> also accounts for climatic changes whereby volcanic activities emits dust particles on the atmosphere, thus the dust tends to trap most of the energy (heat energy) from the sun and this may lead to fall in temperatures instead of scattering it; thus most areas climates have been changing due to the volcanicity; moreover, the fall in temperature has caused wet areas to form glaciers, thus causes the change in climate of these areas to large extent.</p> |  |
|----|---|--|

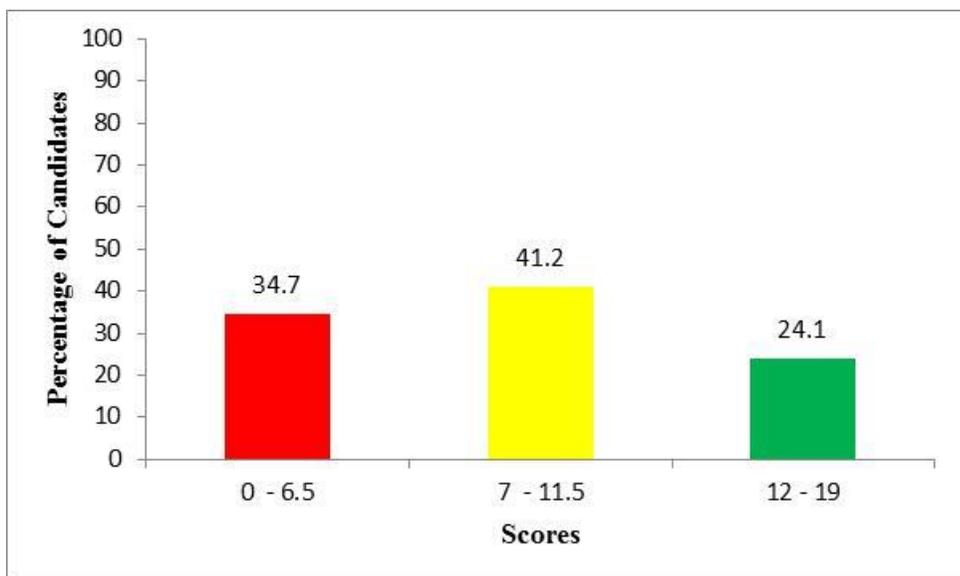
|    |  |
|----|--|
| 8. | <p>Also Milankovitch theory accounts for the climatic change of most areas, the theory explains about the orbital activity that may cause most areas to receive less <del>an</del> insolation and temperatures tend to fall, thus temperature fall causes climatic changes. Moreover, the theory also explains about the concept of perihelion and aphelion, whereby aphelion explains the farthest distance of earth from the sun, thus the distance has been increasing and leads to climatic change of most areas of world, as they receive less radiation.</p> <p>Topography theory, the theory explains about the landform of earth's surface whereby some parts of earth's surface may be forced to raise by various geomorphic process that tend to occur and thus may cause climate of such areas to change as due to the fall in temperature most of the raised areas may change their climate to cold climate. Also, most of these areas may form glacial landscape, for instance the Asian area have experienced climate changes due to this.</p> <p>In addition, Meteorites theory, the theory also explains about the changes in climate due to the process that occur between the meteorites and earth, whereby they collide, the collision of the two may to a large extent lead to an increase in temperature of most areas of the surface. This was suggested and happened " the past years this may to a large extent cause the climatic changes to occur in most parts of the earth's surface.</p> <p>Therefore the climatic changes has been due to various factors that is supported by various theories. Climate changes has led to increase in the sea level of some areas such as ocean due to melting of glaciers, thus has been catastrophe.</p> |
|----|--|

Extract 8.2 is a response from a script of a candidate who managed to provide a correct introduction of climatic change and discussed fairly well theories which account for climatic change with relevant conclusion.

### 2.1.9 Question 9: Water Masses

This question consisted of two parts, (a) and (b). In part (a) candidates were required to describe three stages in the formation of a delta and in part (b) candidates were supposed to explain three conditions necessary for the formation of the delta. The total marks allocated for this question were 20.

The question was opted for by 48.8 percent of the candidates of which: 24.1 percent scored from 12 to 20 marks, 41.2 percent scored from 7 to 11.5 marks, 31.4 scored from 0.5 to 6.5 marks and 3.3 percent scored a 0 mark. The above data shows that the general performance of the candidates who opted for this question was good since 65.3 percent scored 35 marks and above. Figure 9 below illustrates the performance.

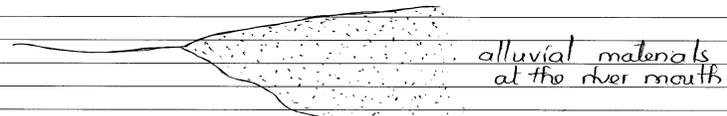
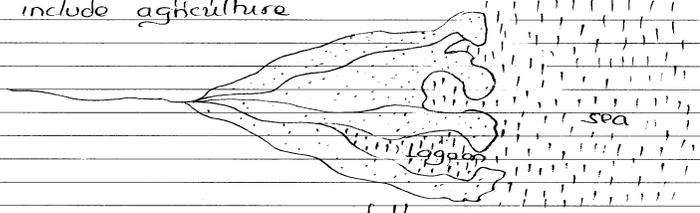


**Figure 9:** Trend of Candidates' Performance in Question 9

The candidates who scored from 12 to 19 marks were able to provide a correct introduction of delta and described three stages in the formation of a delta as: *deposition in the mouth of the river, lagoons have already begun to be filled with sediments and filling of lagoons plus the growth of complete covering of vegetation* with well supportive diagrams in part (a) and in part (b) they were able to explain three conditions necessary for the formation of the delta such as: *there should be active erosion in the upper*

*course and the middle course of the river, the velocity of the river must be sufficiently low to allow its load to be deposited and the river load must be deposited faster than it can be removed.* The variation in their scores was influenced by the strengths and clarity of their explanations. Some candidates in part (a) were able to give a correct introduction, described three stages in the formation of a delta with diagrams which were drawn partially and in part (b) were able to explain three conditions necessary for the formation of the delta. While others in part (a) managed to provide partial introduction, described correctly three stages in the formation of a delta with well-drawn diagrams and in part (b) were able to explain three conditions necessary for the formation of the delta with a conclusion. Extract 9.1 below is a sample of a good response.

**Extract 9.1**

|              |  |
|--------------|--|
| <p>9.(a)</p> | <p>Delta is simply referred to as the feature formed when the alluvial materials deposit to the river mouth. Delta is formed due to the function of the river and that is river deposition. In different parts of the world there are deltas example the Niger delta which has very fertile soil for agriculture.</p> <p>Delta does not originate from anywhere else but through various stages that it passes. The three stages through which the delta is formed are</p> <p>Accumulation of alluvial materials- the alluvial materials are very important in delta formation. The alluvial materials are deposited at the river mouth to form delta. The materials deposited are of different size example fine materials (sand) and middle size materials and also pebbles and shingles are one of materials that forms delta</p>  <p>Formation of distributaries- so as the delta to be formed there are also presence of distributaries. The distributaries are formed when materials become an obstacle thus the water find the way where they can keep on flowing thus penetrates to the materials and get a way which lead to the formation of distributaries.</p>  <p>Formation of a lagoon; is an area of water which is surrounded by the distributaries. The distributaries together with the alluvial materials surrounds the area of water to form lagoon. The extension of the lagoon leads to the formation of delta example the Niger delta where people conducts various economic activities include agriculture</p>  <p>Therefore; Delta is very important in agriculture activities since it encourage the deposition of the materials from the middle and upper course of the river. Through delta people can have good outputs in agriculture and the products can be used for market (sell) or subsistence.</p> |
|--------------|--|

Extract 9.1 represents a candidate who had good performance. He/she managed to provide correct introduction of a delta, described three stages in the formation of a delta with the aid of the diagrams and provided a relevant conclusion.

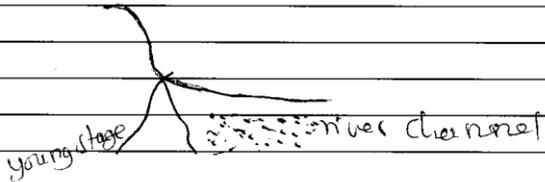
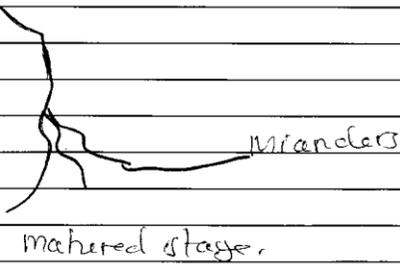
Furthermore, the candidates who scored from 7 to 11.5 marks had moderate knowledge of the concept of Water Masses especially on the interpretation of river patterns and development of a river valley. The quality of responses for individual candidates was reflected through scores of one candidate to another. For example, some candidates in part (a) were able to provide a definition of a delta, described partially three stages in the formation of a delta and in part (b) failed to explain clearly three conditions necessary for the formation of the delta but gave relevant conclusion. Some in part (a) were able to provide definition of a delta and described three stages in the formation of a delta but in part (b) were not able to explain three conditions necessary for the formation of the delta. While other candidates in part (a) were able to provide definition of a delta, described three stages in the formation of a delta and in part (b) explained a few conditions necessary for the formation of the delta with a relevant conclusion.

Moreover, the candidates who scored from 0.5 to 6.5 marks indicated that they had little knowledge and skills on the Water Masses especially in the interpretation of river patterns and development of a river valley. For example, some candidates in part (a) were able to define a delta but failed to describe three stages in the formation of a delta and in part (b) managed to explain partially a few conditions necessary for the formation of the delta. Some candidates in part (a) were able to give partial definition of delta only and in part (b) provided a few conditions necessary for the formation of the delta, while other candidates were able to give definition of delta only and the rest of the question was not attempted. This led to scoring low marks.

On the other hand, the candidates who scored a 0 mark lacked knowledge on a river pattern and development of a river valley. They provided irrelevant answers which were contrary to the demand of the question. For example, some candidates in part (a) failed to define a delta and to describe three stages in the formation of a delta. Also in part (b) they did not manage to explain conditions necessary for the formation of a delta. Some candidates explained the stages of the river development as: *youth stage*, *middle stage* and *upper stage* instead of the stages of the formation of a delta. Some provided irrelevant answers as: *formation stage*, *development of roots*, *it forms other types looking as it is* and *availability of source of*

water instead of the stages of the formation of a delta. Extract 9.2 is a sample of a poor performance.

### Extract 9.2

|       |   |
|-------|---|
| 9. a) | Delta is the accumulation of water in the lake. delta in have three stages.   |
|       | Young stage this is the process where by river source undergo msander to the river channel                                  |
|       |    |
|       | Mature stage these are the stage where by delta become developed to the other source of water example lake, ocean or river. |
|       |    |
|       | Old stage<br>Also delta undergo old stage in this stage delta became strong because is matured.                             |

Extract 9.2 shows a sample of a candidate who provided the stages of river development instead of three stages of the delta formation.

## 2.2 113/2 GEOGRAPHY PAPER TWO

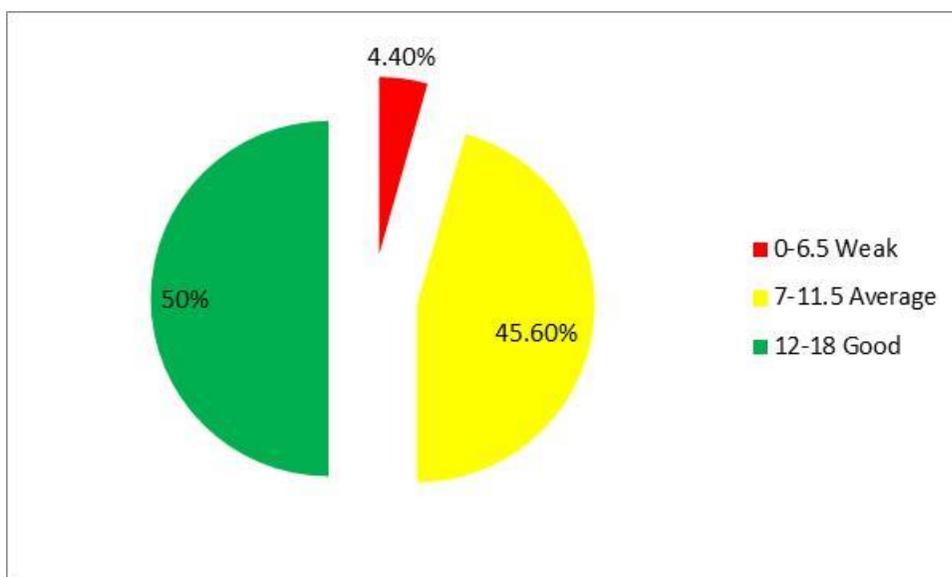
### SECTION A: POPULATION AND DEVELOPMENT

This section consisted of three questions 1, 2 and 3 which were set from the Population and Development Topic and the candidates were required to answer any two (2) questions. Each question had 20 marks.

#### 2.2.1 Question 1: Population and Development

This question instructed the candidates to analyse eight population problems of underdeveloped countries.

It was one of the questions which were attempted by a large number of candidates. A total of 99.2 percent opted for it and it was the fourth in the ranking of well-done questions in Geography paper. The general performance in this question was good as 95.6 percent of the candidates scored 35 marks and above. Analysis in this question shows that 50 percent scored from 12 to 20 marks, 45.6 percent scored from 7 to 11.5 marks, 4.4 percent scored from 1 to 6.5 marks. Figure 1 below illustrates the performance.



**Figure 1:** Trend of Candidates' Performance in Question 1

The candidates who scored from 12 to 20 marks showed understanding on the subject matter and were able to understand the demand of the question.

They also had good writing skills and were able to analyse eight population problems of underdeveloped countries such as: *poor housing and health conditions, high rate of unemployment, increase of beggars, prostitution and crimes, underutilization of agricultural resources, uneven distribution of population and high birth rate and child mortality*. The variations of their scores were determined by the strength and correctness of their explanations. Extract 1.1 illustrates a sample of a candidate who performed well.

## Extract 1.1

|    |  |
|----|--|
| 1. | <p>Population refers to the number of people living in a particular place or area. Population problems are the unwanted impacts or undesirable effects of increase/change in population in an area. Tanzania faces a lot of population problems which will be discussed in the essay below; Tanzania's population problems arise from increase in population in some areas or regions, namely Kilimanjaro, Dar es Salaam and Arusha.</p> <p>The following are (3) population problems of underdeveloped countries:</p> <p><b>Unemployment of people;</b> Due to large number of people in an area, some few people will only be employed and hence a large number of people will be left unemployed, and hence fall in income, and standards of living of people. This aspect is common in countries like Tanzania where a lot of people in Dar es Salaam are left unemployed or without work since no jobs are vacant or lack of jobs. Nigeria also faces the same predicament.</p> <p><b>Increase in dependency ratios.</b> Since the number of people who will be employed, they will have to support the large number of people who are left unemployed or those large number of children who are present in a family. This leads to increased poverty because the money is used to provide for the family members instead of doing something productive like further trade.</p> <p><b>Increase in government burden;</b> the government is burdened with the task of taking care of the unemployed people who are many through unemployment benefits and subsidies/free food. Also the government has to increase expenditure to improve and expand more social amenities to make sure that every individual is provided with social service. Example; In Tanzania, the government has to increase its expenditure to</p> |
|----|--|

|  |  |
|--|--|
| improve health services, water supply and power supply to improve social services.   |  |
| Inadequate provision of social services; social services are highly overutilized leading to their damage or underprovision due to the large number of people who require social services which are few; these include education, health, water and power supply have to be improved because of low supply of their services which is vitally needed to the society.  |  |
| Example; In Dar Es Salaam  |  |
| Poor housing and congestion; there also emerges slums in the urban areas due to poor planning and improper construction of houses which brings bad image to the society. Also, there is a high number of car congestion in roads and also people are a lot leading to noise, congestion. for example in Kenya, there are places where there is high accumulation of slums like Kibera and also in Tanzania, areas like Manzere, Tandale are full of slums. |  |
| Emergence of social evils; like prostitution, crime, theft, robbery are all social problems that tend to affect the society after unemployment; people tend to find other sources of income which leads to death of some people due to HIV transmission, also loss of valuable property may cause his/her moral dehumanisation resulting to psychological and mental problems.   |  |
| Example; Areas like Kariakoo; famous for having thieves, while areas like Sinza and Urema wa fisi are regarded as areas where, prostitutes are highly prevalent.   |  |
| Outbreak of diseases; disease like Malaria, Cholera, UTI, Meningitis are easily communicable and hence could lead to people suffering and some may lead to death due to large number of people in a small area, making transmission of diseases relatively easy, for example; In Dar Es Salaam, Cholera is an endemic diseases which happens frequently.   |  |

Extract 1.1 represents a sample of a candidate's response who managed to analyse population problems of undeveloped countries such as: unemployment, frequent outbreak of diseases, emergence of social evils, poor housing and congestion, inadequate provision of social services.

Furthermore, the candidates who scored from 7 to 11.5 marks were able to understand the demand of the question but were either not able to provide the required number of points as the question demanded or mixed the relevant and irrelevant points. This was due to the limited knowledge they had on the subject matter. Some of the responses were such as: *high birth rate and child mortality, unemployment, political instability, poor social services, tribalism, outbreak of diseases, sex preference, underutilization of agricultural resources, and uneven distribution of population*. On the other hand, majority of the candidates provided partial explanations of their points which adversely affected their performance by scoring not more than 11.5 marks.

Similarly, some of the candidates who scored from 1 to 6.5 marks lacked focus on the demand of the question. Others responded on the factors which hinder development in Africa such as *corruption and embezzlement of some trusted officials, natural calamities, poor science and technology and weak government to organize with strong motivation*, however, they obtained just a few marks. Others had little knowledge on the subject matter as a result they failed to provide the required number of points as per the questions demand. Nevertheless, the few correct points provided were not well explained while others responded on the causes of population explosion. Extract 1.2 is a sample of such a weak performance.

## Extract 1.2

|   |   |  |
|---|---|--|
| 1 | <p>Population problems refer to the ones (problems) which caused by variation in population in a given area. In underdeveloped countries there is normally high birth rates as well as high death rates and hence bring about population problems. For example Tanzania.</p> <p>The following are population problems that bring about by high death rates in underdeveloped countries;</p> <p>Early marriages, in most underdeveloped countries, girls of young age are given to marriage and this is due to ideological perceptions to parents that girls are of no use to the family and hence should be given for marriage as soon as possible and hence there is a high occurrence of many birth due to a large range to menopause and hence high birth rate. For example Zaramo, <del>Par</del> tribe, Tanzania.</p> <p>Sex preference, this is when a family prefers to have a children of certain gender. Most African societies regard to as underdeveloped tend to have families which prefer male children and hence a family tends to reproduce until it gets a child of its preference. Normally men are preferred said that they will extend the clans surname. For example the sukuma tribe, Tanzania.</p> <p>Poor family planning, normally in the underdeveloped countries there are many people who are illiterate and unaware of methods of family planning such as abstaining and use of contraceptives or even calender methods hence people tend to reproduce and hence increase in population. For example, rural areas in Tanzania.</p> <p>Polygamy, this is when one man has more than one wife, it is mostly practised in underdeveloped countries such as Tanzania and other African countries and it is regarded as wealth and pride but instead it leads to a high population. For example King Mswati, Swaziland</p> <p>The following are the population problems that bring about high death rate;</p> <p>Poor medical services, there is a problem of provision of health services in underdeveloped countries and also there a few centres for</p> |  |
|---|---|--|

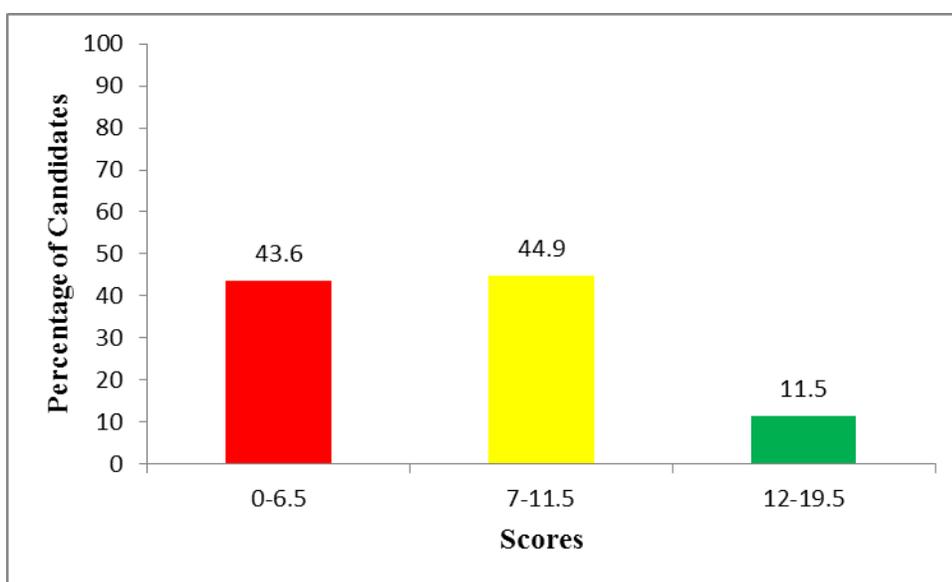
|   |
|---|
| to parents that girls are of no use to the family and hence should be given for marriage as soon as possible and hence there is a high occurrence of many births due to a large range to menopause and hence high birth rate. For example Zaramo, <del>Dar</del> tribe, Tanzania.   |
| Sex preference, this is when a family prefers to have a children of certain gender. Most African societies regard to as underdeveloped tend to have families which prefer male children and hence a family tends to reproduce until it gets a child of its preference. Normally men are preferred said that they will extend the clans surname. For example the Sukuma tribe, Tanzania. |
| Poor family planning, normally in the underdeveloped countries there are many people who are illiterate and unaware of methods of family planning such as abstaining and use of contraceptives or even calendar methods. Hence people tend to reproduce and hence increase in population. For example, rural areas in Tanzania.   |
| Polygamy, this is when one man has more than one wife, it is mostly practised in underdeveloped countries such as Tanzania and other African countries and it is regarded as wealth and pride but instead it leads to a high population. For example King Mswati, Swaziland   |
| The following are the population problems that bring about high death rates;  |
| Poor medical services, there is a problem of provision of health services in underdeveloped countries and also there a few centres for  |

Extract 1.2 shows a sample of a response from a script of a candidate who explained causes of a rapid growth rate (population explosion) in the underdeveloped countries such as: sex preference, poor family planning, polygamy, poor health services etc instead of population problems of underdeveloped countries.

## 2.2.2 Question 2: Population and Development

The question required the candidates to explain why population growth in Tanzania is a natural outcome of women's lack of economic and social opportunities, by giving six reasons.

It was opted for by 39.5 percent of all the candidates of which 11.5 percent scored from 12 to 19.5 marks, 44.9 percent scored from 7 to 11.5 marks, 42.7 percent scored from 0.5 to 6.5 marks and 0.9 percent scored a 0 mark. The general performance in this question was average as 56.4 percent of the candidates scored 35 marks and above. Figure 2 below illustrates the performance.



**Figure 2:** Trend of Candidates' Performance in Question 2

The candidates who scored from 12 to 19.5 marks were able to understand the demand of the question. They had good knowledge on the subject matter and good writing skills. They expounded reasons as to why population growth in Tanzania is a natural outcome of women's lack of economic and social opportunities such as: *early marriage, cultural beliefs, limited access to sufficient and quality family planning services and limited social mobility*. The variations of their scores were determined by the

strength and correctness of their explanation. Extract 2.1 indicates a sample of a candidate who performed well in this question.

### Extract 2.1

|    |   |
|----|---|
| 2. | <p>Population growth refers to the increase of the number of people within the particular area or country any territory. The population growth in Tanzania is a natural outcome of women's lack of economic and social opportunities as follows:</p> <p>Lack of education; in the most of women in Tanzania, have no enough education, so that they can't be able to avoid having many childrens and hence high population. This is because in most parts of Tanzania, women lack education that can help them have a chance equal to men during to need and to have a number of children required.</p> <p>Failure of women to involve in the decision making, in the most families women are not involved in the decision making, and hence, have no any say either to involve in the economic activities, so that they can be busy with their jobs, instead they are jobless as a result of increasing bearing childrens hence the population growth.</p> <p>Unemployment among women this is because, unavailability of employment to women, made them to remain at home with their husbands as a result that at any time thinking for reproducing and increasing number of children since they are not committed to their work.</p> |
|----|---|

|  |
|--|
| <p>Poor health services and lack of fertility regulations among women; in most parts of Tanzania, there is poor systems of health services like presence of fertility regulation methods (family planning) so that women can be able to choose the number of children can have for her accommodation.</p> <p>Bad social-cultural practices among the women, that can lead to increase the population rate. For example, women are be ready to be inherited when their husbands dies, also women when having number of children, it is a priority to her, that is a measure of womanhood. And this social-cultural practices among women are caused by lack of education among them. Also having a many children for naming relatives.</p> <p>Early marriages among women; now in Tanzania, most of women get married when they are still <sup>not</sup> matured, so this provide a room for her to have a long time of reproductive as a result having many childrens, hence high rate of population growth in Tanzania.</p> <p>Therefore; the population growth in Tanzania is a natural outcome of women's lack of economic and social opportunities. Hence the population growth must be grown at a proper manner so that the population pressure is avoided.</p> |
|--|

Extract 2.1 shows a candidate who was able to provide good responses such as: The level of education especially female education, early marriage, lack of decision making and cultural beliefs in explaining why population growth in Tanzania is a natural outcome of women's lack of economic and social opportunities.

The candidates who scored from 7 to 11.5 marks revealed to have moderate knowledge and skills on Population and Development especially on the concept of population growth. However, the variation of their scores was attributed to the way they responded to the question. For instance, some candidates were able to give correct meaning of population growth, explain partially with reasons why population growth in Tanzania is a natural outcome of women's lack of economic and social opportunities without relevant conclusion.

The candidates who scored from 0.5 to 6.5 marks showed that they were not so competent with the subject matter of Population and Development especially on the concept of population growth. For example, some candidates were able to give correct introduction of population growth; some did not manage to give correct introduction of population growth, but explained partially a few reasons why population growth in Tanzania is a natural outcome of women's lack of economic and social opportunities without relevant conclusion.

On the other hand, the candidates who scored a 0 mark did not manage to answer the question according to its demand. Their responses show that they lacked knowledge and skills on the topic of Population and Development especially on the concept of population growth. For example, one candidate provided the impact of population growth such as: *spread of diseases, pressure on resources and increase in dependent ratio*. These responses are contrary to the demand of the question. Extract 2.2 below is a sample of a poor response.

## Extract 2.2

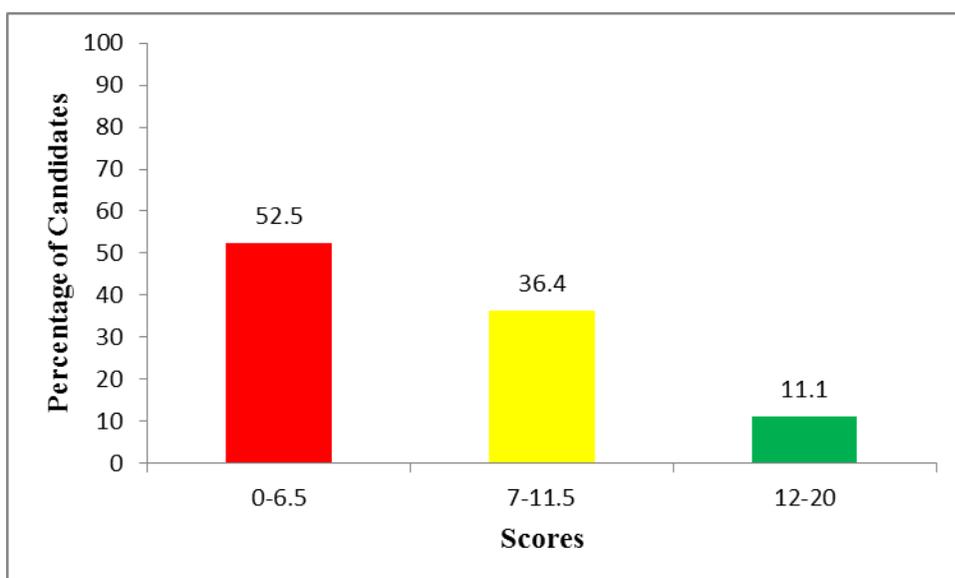
|    |   |
|----|---|
| 2. | <p>Population growth refer to the increase number of people in a given area compared to available resources. This means the number of people become large compared to the resource spread on that area. Population growth more experience in developing countries like Tanzania.</p>  |
|    | <p>The following are the reasons as to why population growth in Tanzania is a natural outcome of woman's lack of economic and social opportunities. This facilitated the following;</p> <p>It lead to unemployment, this mean that many people failed to be employed especially women's. This is because employer takes only men to fit in their sectors instead of women.</p>  |
|    | <p>Shortage of land; also due to the increase of population people tend to use a large land for establishing settlement rather than developing agricultural activities. So this lead women to lack even the land for establishing different economic activities like agriculture.</p> <p>It lead to the poor social services like health, education and water services. Population growth effect budget of the government on provision of social services. This cause poor health among the woman and also difficult their during birth due to poor health services like health helping in birth.</p> |
|    | <p>Government of Tanzania should prepare a good policy so as to wage against population growth which effect women's social and economic opportunities. This is because woman is a backbone of the country, when affected that means nothing can go on. Also not only the women can be affected due to population growth but also men and the world at large can be affected too. This is because problem such as shortage of land, unemployment, poor social services do not affect only women rather it become a world problem.</p>  |

Extract 2.2 is a sample of a poor response of a candidate who responded on negative impact of population growth such as: unemployment, poor social services and shortage of land, instead of explaining why population growth in Tanzania is a natural outcome of women's lack of economic and social opportunities, by giving six reasons.

### 2.2.3 Question 3: Population and Development

In this question candidates were required to examine four achievements and four constraints of population policy in Tanzania.

It was opted for by 61.1 percent of all the candidates of which 2.1 scored a 0 mark, 50.4 percent scored from 0.5 to 6.5 marks, 36.4 percent scored from 7 to 11.5 marks and 11.1 percent scored from 12 to 20 marks. The general performance in this question was average as 47.5 percent of the candidates scored 35 marks and above. Figure 3 below illustrates the performance.



**Figure 3:** Trend of Candidates' Performance in Question 3

The candidates who scored a 0 mark provided poor responses due to limited knowledge on the subject matter. They failed to understand the prerequisite of the question and provided generalised responses. The majority of the candidates who scored a zero mark were unable to provide correct responses from the introduction to the conclusion. For example, one candidate defined population policy as: *the statement provided by leader which can be implicit or explicit*. From this definition, as provided by the candidate, it was observed that there was a gap of information partly due to insufficient knowledge on population policy. The correct definition was

supposed to be: *Population policy refers to the guiding statement so as to attain some demographic goals. It is a deliberate effort by the government to influence the demographic factor like fertility; mortality and migration.* Similarly, the candidates were not able to provide the achievements and constraints of population policy. As for the achievements, the candidates provided generalised responses like: *Increase in population in Tanzania, improvement of education, lead to increase in agricultural sector.* While they erroneously argued that: *presences of diseases, lack of employment, absence of market, poor social services.* Were the constraints of the population policy in Tanzania. Extract 3.1 is a sample of a poor response.

### Extract 3.1

|   |   |
|---|---|
| 3 | <p>Population policy refer to the statement provided by the leader which is <del>is</del> can be implicitly or explicitly, the achievement of population policy in Tanzania is It facilitates development of Education, It facilitate development of Agriculture it lead to the increase of population in the countries also there is constraints. low capital, low science and technology, low level of education.</p> <p>The following are the achievement of population policy in Tanzania as follows</p> <p>It facilitate the increase of population this is among of the achievement of population policy because the number of people are increase to 53 millions</p> <p>Improvement of Education, Due to the low level of education in Tanzania during 2002 up to 2010 now the level of education is increase and this is among of the achievement of population policy in Tanzania and able to employed people lead to the increase in Agriculture production, Before the introduction of policy of Kilimo Kwanza the Agriculture production was decrease but now day the level is increase so is among of achievement</p> <p>It facilitate the opening of different industries like SIDO, this is among of the achievement of population policy in Tanzania. They through this government are able to obtained taxes and increase national income</p> <p>The following are the constraints of population</p> |
|---|---|

3. This policy is Tanzanian  
 Presence of diseases like cholera HIV/AIDS  
 Due to the increase in population in the country,  
 cause the increase or eruption of disease that  
 cause the population to decrease when the  
 large number of people dies this is among of  
 the constraints of population policy in Tanzania  
 Lack of employment, Ma. Large number  
 of people are educated so that the government  
 have no ability for employed these group of  
 people so this cause the people to remain  
 jobless this is among of the constraints.  
 Absence of Market for selling their product,  
 this is among of the constraints of population  
 policy in Tanzania this make the product to  
 be destroyed by disease because the lack of  
 Modern Method for keeping them.  
 Poor social services, like health services, Due to  
 the policy of 'Many child' the government doesn't  
 have Ma. good social services for insur-  
 ring the good health for the growing child and  
 the Mother so this is among of constraints of  
 Population policy in Tanzania.

Extract 3.1 represents a sample of a candidate who provided irrelevant responses. In achievements the responses provided were: increase in population in Tanzania, improvement in education, increase in agricultural sector. In constraints the responses were: presence of diseases, lack of employment, and absence of market. These responses were not related with the demand of the question.

The candidates who scored from 0.5 to 6.5 marks provided sketchy responses partly due to low level of mastering the subject matter. They also misunderstood the demand of the question and provided of generalised responses. However, they were able to score up to 6.5 marks either by

defining well some of the demographic terms or by providing undetailed explanations. For example, one candidate managed to provide relevant introduction of population policy, but failed to explain four achievements and four constraints of population policy in Tanzania. Other candidates wrote challenges which have necessitated the review of the population policy such as: *high level of adolescence, high prevalence of STDs and pregnancies*. As a matter of fact this candidate misconceived the question since both ideas are taught in the concept of justification of the population policy.

Furthermore, the candidates who scored from 7 to 11.5 marks had moderate knowledge of the subject matter and were able to meet the demands of the question. For example, some candidates were able to give correct definition of population policy, explained partially few achievements and constraints of population policy in Tanzania with relevant conclusion. Some managed to provide meaning of population policy, explain only a few achievements of population policy in Tanzania without constraints and conclusion. Some candidates were not able to give correct introduction of population policy, failed to explain achievements and constraints of population policy in Tanzania. While other candidates were able to provide definition of population policy, but failed to explain achievements. However, they were able to explain constraints of population policy in Tanzania without relevant conclusion.

On the other hand, the candidates who scored from 12 to 20 marks were conversant with concept of population policy, and their ideas were well presented and consistently related to the question. The essays were well structured with cohesive paragraphs and good flow. However, their marks varied from 12 to 20, depending on the strengths and accuracy of their answers. For instance, some candidates were able to give correct definition of population policy, and explained four achievements of the population policy such as: *there is awareness on the population issues, the adoption of explicitly population policy of 1992, expansion and introduction of population studies in the learning institution in the country and increased number and capacity of NGOs, community based organisations and faith based organisations engaged in population related activities*. As for the constraints of population policy in Tanzania they pointed out: *inadequate*

*human and financial resources, poor information and communication system, non-establishment of planned policy coordination and implementation arrangements and policies mainly addressed family planning and child spacing activities.* They ended up with relevant conclusions which showed high level of critical analysis. Extract 3.2 illustrates a sample of a candidate who performed well in this question.

### Extract 3.2

|   |   |  |
|---|---|--|
| 3 | <p>population policy is the defined as statement, law or regulation which formulated by government in order to control population growth in Tanzania. In Tanzania there are two type of population policy that include implicit population and explicitly population policy. Tanzania adopt explicitly population in 1992 which have direct impact on the population. The following below are four achievement of population policy in United Republic of Tanzania:</p> |  |
|   | <p>Introduction of population studies in higher learning institutions; is the achievement of population policy in Tanzania. Government has achieved in population policy in Tanzania since because there was introduction and expansion studies of faculty in higher learning institutions like in universities and college in order to increase experts who specialize in the concerned with population, hence achievement of population policy.</p>                   |  |
|   | <p>Adoption of population policy known as explicitly; is the another achievement of population policy in Tanzania; Adoption of explicitly population policy which has direct impact on rapid population growth. Adoption of explicitly population policy in Tanzania was opted or adopted in 1992 which aimed at promote relations between available population and resources available.</p>  |  |

|  |  |  |
|--|--|--|
|  | <p>Increase awareness of reproductive health and high knowledge and use of contraceptive method; is the among achievement of population policy in Tanzania. Government has tried her level best to increase awareness of reproductive health and use of contraceptive in order to control population, a good example of contraceptive method include use of condom, family planning, in order to control population growth in Tanzania, hence is achievement</p> |  |
|  | <p>Increase number and capacity of Non-Government organization and increase awareness to the use related to population; is the one of achievement of population policy in Tanzania. Government of United of Republic of Tanzania has increased number and capacity of non-government organizations (NGOs) that related to the use of population in order to increase awareness.</p>  |  |
|  | <p>Apart from achievement, the following below are four constraint of population policy in Tanzania:</p>   |  |
|  | <p>Financial constraint; is the constraint of population policy in United Republic of Tanzania. Financial constraint or financial problem is big challenge which face implementation of population policy in Tanzania since because government of Tanzania do not have enough fund to introduction population studies in the</p>   |  |

Extract 3.2 illustrates a sample of good a response. The candidate provided relevant achievements of population policy in Tanzania and its constraints.

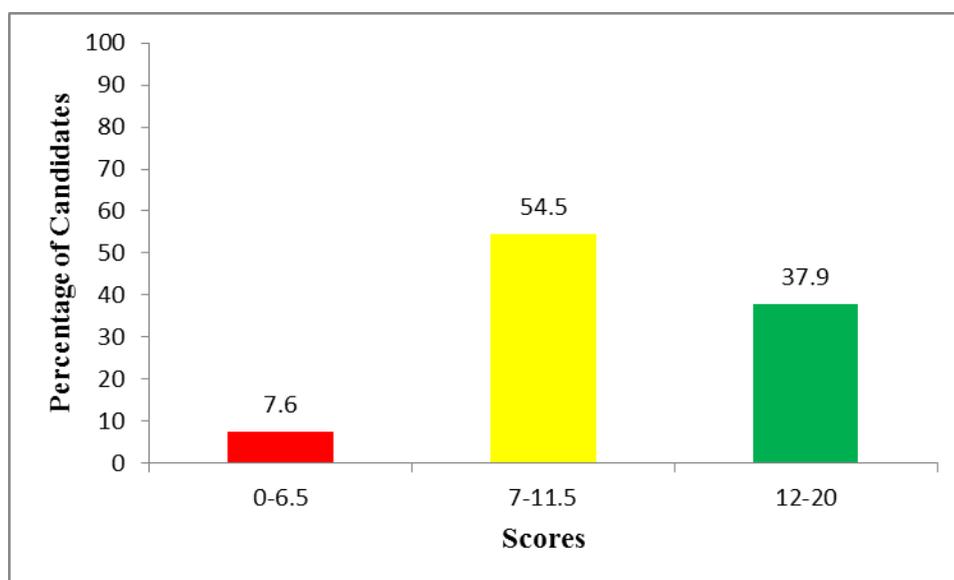
## SECTION B: Regional Focal Studies

This section consisted of five questions 4, 5, 6, 7 and 8 which were set from the Regional Focal Studies Topics and the candidates were required to answer any three (3) questions. Each question had 20 marks.

### 2.2.4 Question 4: Agricultural Development

The question required the candidates to assess six challenges facing Tanzanian peasants in practicing organic farming.

It was opted for by 55.6 percent of all the candidates of which 37.9 percent scored from 12 to 20 marks, 54.5 percent scored from 7 to 11.5 marks and 7.6 percent scored from 0.5 to 6.5 marks. The general performance in this question was good as 92.4 percent of the candidates scored 35 marks and above. Figure 4 below illustrates the performance.



**Figure 4:** Trend of Candidates' Performance in Question 4

The candidates who scored from 12 to 20 marks precisely focused on the question's demands. It was possible to them to assess the challenges facing Tanzanian peasants in practicing organic farming with clear explanation. Some of the relevant responses given were: *low public awareness on organic farming, market of organic produce is not well organised in Tanzania, high input costs, inadequate capacity to carry out comprehensive research, training and extension services and low level of technical-know how*. The variation of their scores was determined by the quality of the essays for individual candidates and the total number of points provided as the question demanded. Extract 4.1 shows a sample of such a good response.

## Extract 4.1

|    |  |
|----|--|
| 4. | <p>Organic farming is the farming system which involves the use of biotic factors only, this does not involve the use of synthetic or chemicalized materials such as the inorganic fertilizers, pesticides. These farming involves the use of green and compost manure for their crops. Tanzanian peasants have engaged in this farming system because it is cheap and affordable since they use the remains or by products of animals thus one benefits more if he or she raise animals while practicing organic farming. Some of the challenges facing most peasants in Tanzania in the organic farming include,</p> <p>Pests and diseases, In Tanzania most of the crops are endangered by the pests who eat up the crops and make holes thus decline their value and diseases that cause low outputs and unqualifiable produce example of <del>pest</del> pests include Ticks, Tree Top flies and diseases as Nigama for the crops hence the output is of low quantity and quality</p> <p>Unfavourable climatic conditions, the climatic conditions in Tanzania fluctuate time up to time this unreliable rainfall and some seasons for droughts which cause decline in the levels of output as the crops dry up due to lack of water. This fluctuations in the levels of when the climate is favourable leads to loss of patience and hence the peasants may give up if they continue getting losses.</p> |
|----|--|

|  |  |  |
|--|--|--|
|  | <p>Inadequate market availability for the crops produced, the output gotten from the produce is of low quality and quantity hence its market is low since most do not prefer the use of unquality crops and as well the advertising power is low thus the market is unaware of the presence of such crops especially in the outside market hence the peasants do not gain large profits thus are discouraged to go on producing.</p> <p>Low levels of technology among the Tanzanians, have the methods and tools used to produce are of low quality such that they cannot yield better outputs. The machines used are not mechanized thus the use of simple and small tools in the farming process and thus limiting the levels of production hence decline in the sector.</p> <p>Inadequate funds available, The organic farming needs sufficient capital to develop but the Tanzanian peasants are poor and thus cannot meet the demand needs of the farming activities such as the costs of the sophisticated machines are so high and hence cannot purchase them rather rely on the same old technologies among themselves.</p> <p>Underdeveloped infrastructure, this exists on the transport and communication sectors, the <sup>country</sup> Tanzania as whole is not well developed in these sectors especially in the rural areas where the majority or agricultural activities take place thus hindering the movement of the crops produced from the production area to the industries or market which makes them incur a lot of costs that discourage the peasants to go on with the production process.</p> <p>Despite these challenges facing Tanzanian peasants but agriculture is still the backbone to the economy of the country and hence it needs to advance and put more efforts on the sector thus by providing subsidies and tax holidays or exemptions to the peasants to encourage production and advance the transport and communication sectors.</p> |  |
|--|--|--|

Extract 4.1 indicates a candidate who managed to answer the question relatively well. He/she managed to provide challenges facing peasants practicing organic farming in Tanzania such as: pests and diseases, unfavourable climatic conditions, inadequate market and low level of technology.

The candidates who scored from 7 to 11.5 marks were able to understand the demands of the question but failed to provide enough points as the question required, while those who managed to write the required number of points mixed correct and incorrect points as a result their scores could not exceed 11.5 marks.

On the other hand, the candidates who scored from 0.5 to 6.5 provided superficial responses due to limited knowledge on the subject matter. Some presented wrong points not related to the question. For example, one candidate provided irrelevant introduction, provided wrong six challenges facing Tanzanian peasants in practicing organic farming such as: *availability of health services, industrialization, low production, deforestation, soil erosion, family commitment and price fluctuation*. Extract 4.2 represents a poor response.

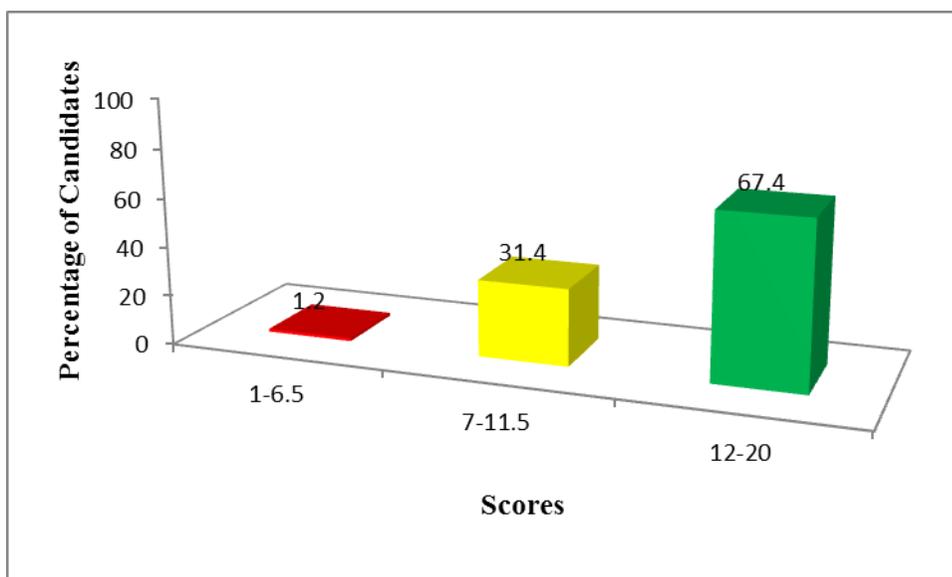
## Extract 4.2

|    |   |
|----|---|
| 04 | <p>Agricultural Peasant refers to the Practising on farming activities through using primitive tools for production, Peasants involves the cultivating of large piece of lands so as to obtain the production. Some party in Tanzania that Practising on large and small scale Agriculture like Morogoro (Pilot party) Shinyanga (Sukuma), and all party in Tanzania especially Eastern and Northern party.</p> <p>The following are challenges facing Tanzania on Practising organic farming which are:</p> <p>Land conflicts example 2002 in Mara region, 2006 in Morogoro between farmers and Pastoralism, due to land conflict, cause the Practising organic farming to failure and hence the rate of Practising will decline and cause to decline in land for farming.</p> <p>Climatic condition example climatic changes especially during summer and winter, due to the climatic changes can enhance the farming activities, failure to be successful due to the social obstacle which enhance farming activities.</p> <p>Shortage of enough land on farming, due to lack of enough land and the land are to be covered with for Pastoralist hence due to that can cause to failure in reaching to their aims and hence enhance and cause to failure.</p> <p>Lack of enough capital to the people, example due to poverty among the people, once the rate of poverty increases cause also the decline in number of some parties on Practising due to the absence of enough capital to the people which can cause the people to enabling on Practising on primitive sector.</p> |
|----|---|

Extract 4.2 is a response from a candidate who explained factors affecting agricultural development such as: land conflict, climatic condition and lack of enough capital contrary to the demands of the question.

### 2.2.5 Question 5: Livestock Keeping and Management

This question instructed candidates to examine eight factors for the successful beef farming in the U.S.A. It was opted for by 75.5 percent of all candidates and was second in the ranking of well performed questions of which 67.4 scored from 12 to 20 marks, 31.4 scored from 7 to 11.5 marks, 1.2 percent scored from 1 to 6.5 marks. The general performance in this question was good as 98.8 percent of the candidates scored 35 marks and above. Figure 5 below illustrates the performance.



**Figure 5:** Trend of Candidates' Performance in Question 5

The candidates who scored from 12 to 20 marks exhibited a thorough understanding of the subject matter. They explained difficulty concepts, helped with a good essay organisation and were able to examine factors for the successful beef farming in the USA such as: *the use of advanced technology, reliable water supply, reliable transport and communication network. Presence of labour power and availability of capital to be invested in beef farming* and a relevant conclusion. Extract 5.1 is an example of relevant responses.

## Extract 5.1

|    |   |  |
|----|---|--|
| 5: | <p>Beef farming refers to the keeping of cows for the sole purpose of meat. The meat from cow is called Beef. USA is well known for the Beef farming which is practised in Areas such like California and areas around the corn belt. The following are the eight factors for the successful beef farming in Europe:</p> <p>First, the use of Advanced Technology, USA has a strong base in science and technology with the frequent innovations which help to boost up the beef farming. The use of advanced methods for cultivating and good storage facilities for Beef before exported to other areas. Innovations on modern freezers and refrigerators for storing Beef in first hand.</p> <p>Second, Fertile soil, also another factor that supported the successful beef farming in USA is the fertile soil which support the growth of pastures for Animals (cows) to consume. The animals have to be fat so as to produce high quantity of quality meat thus due to fertile land it promoted production of pastures which are called AlfaAlfa.</p> <p>Also another factor is the use of Irrigation method in Agriculture; the usage of Irrigation system in the production of AlfaAlfa led to no disturbance from the climatic change. By apply Irrigation, pastures were available as cultivation does not rely on the climate. Even if there is no rainfall or low rainfall, it was not an obstacle to the cultivation of pasture as Irrigation system was used.</p> |  |
|----|---|--|

|  |  |  |
|--|--|--|
|  | Lastly, Good government support                      |  |
|  | the USA government is playing a great role in        |  |
|  | making sure beef farming is maintained and           |  |
|  | developed so as to bring more Incomes. This          |  |
|  | is by providing Education to personels dealing       |  |
|  | with Beef farming, Also by providing loans and       |  |
|  | grants and creating ready market for the beef        |  |
|  | products thus promoted it's successful.              |  |
|  | Conclusively, Beef farming is an asset               |  |
|  | as it has the following advantages like provide      |  |
|  | employment opportunities, source of national income, |  |
|  | availability of Meatas food and lastly developm-     |  |
|  | ent of other sectors like Agricultural and transp-   |  |
|  | ort and communication sectors.                       |  |

Extract 5.1 is an example of a good response. The candidate was able to examine the factors for the successful beef farming in the U.S.A. such as: the use of advanced technology, availability of fertile soil, the use of irrigation methods and good government support. The candidate ended up with a relevant conclusion.

Similarly, the candidates who scored from 7 to 11.5 marks had moderate knowledge on the subject matter on livestock keeping and management especially on the concept of commercial livestock farming. For instance, some candidates were able to provide the background and definition of beef farming in the USA, explain partially factors which led to successful beef farming in the USA. Some managed to provide definition of beef farming, explained few factors which led to successful beef farming in the USA without a relevant conclusion. Others managed to provide partial introduction, explained a few factors which contributed to partial successful beef farming with relevant conclusions.

On the other hand, the candidates who scored from 1 to 6.5 marks had limited knowledge of beef farming in the USA. As a result they responded partially to the question by providing few relevant points. For example, one candidate managed to provide few a correct points about factors for

successful beef farming in the USA. He/she also explained other points on the importance of beef farming which was contrary to the demand of the question. Extract 5.2 is a sample of such responses.

### Extract 5.2

|   |  |
|---|--|
| 5 | <p>Beef farming refers to the process of selling and produce meat in USA through the following methods which may cause development beef farming. the following are the factor for the successful beef farming in USA these are the following.</p>  |
|   | <p>Market, refers to the situation where by sellers and buyer meet to transaction there may occur due to availability of market help for the development of beef farming due to presence of internal and external market which supply beef farming in the USA.</p>                                       |
|   | <p>High science and technology, through in the advertisement of help every part of the world to supply meet / beef farming of the causes of success of the beef farming in USA for example through provision of commodities in every part of the world of help to the growth of meat / beef farming.</p> |
|   | <p>Presence of raw material, for example presence of animal which used for the process of making beef farming of causes the success of</p>   |

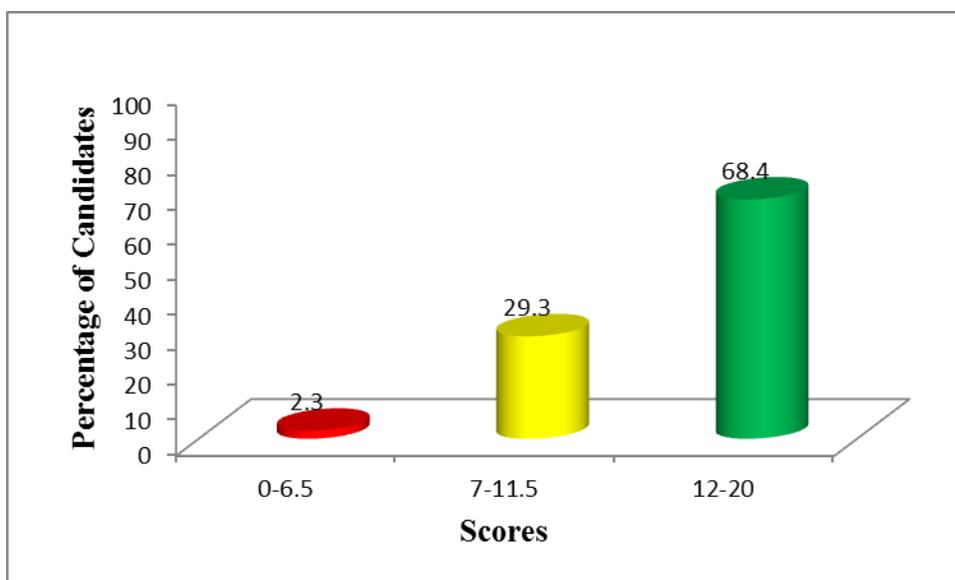
|   |  |
|---|--|
| 5 | <p>beef farming the raw material support growth for the development of other sector which may be used for beef farming.</p> <p>Development of other sectors, for example Agriculture sector is source of the growth of beef farming in USA and through these the united state of America provide loans to the beef farming in the country by using high technological.</p> <p>Employment opportunities, refers to the resources are able and willing to do work be through beef farming help to the availability of employment to the people these is among for the factor for the successful beef farming in the USA.</p> <p>Increase of income, through living standard of the people through working condition of the beef in the government of USA for example through employment it help to increase in income for the government and personal in the beef farming.</p> <p>Increase Revenue to the government, refers to the amount of money that obtain government through different companies or people in the country these may occur due to presence of both social and economic development in the government of USA.</p> <p>Development of both social and Economic, these may occur through determination of economic development for example per capital income, Availability of social services good transport and communicate it is indicate the beef</p> |
|---|--|

Extract 5.2 is a sample of a candidate's response who managed to write few correct points such as: reliable market and advanced technology and other irrelevant points.

### 2.2.6 Question 6: Sustainable use of Fuel and Power

This question demanded the candidates to justify the statement that, fossil fuel are both energy resources for economic development and instruments of environmental destruction by giving eight points.

This question was opted for by 21 percent of all the candidates and was the third well performed question, of which 68.4 percent scored from 12 to 20 marks, 29.3 percent scored from 7 to 11.5 marks, 2.2 scored from 1 to 6.5 marks, and 0.1 scored a 0 mark. The general performance in this question was good as 97.7 percent of the candidates scored 35 marks and above. Figure 6 below illustrates the performance.



**Figure 6:** Trend of Candidates' Performance in Question

The candidates who scored from 12 to 20 marks manifested a clear understanding of the concept on sustainable use of fuel and power especially on non-renewable energy resources. Strengths and weaknesses of their points made their marks to vary. For example, some candidates were able to provide correct introduction of fossil fuels and explained the usefulness of fossil fuels such as: *provision of power for various transport facilities, natural gas can be used to manufacture fertilizers, petroleum is used for manufacturing synthetic fibres, toys and for road bitumen,*

*employment creation and encourage scientific development.* They also justified how fossil fuel can be instruments of environmental destruction such as: *killing aquatic life, global warming, environmental degradation, formation of acidic rain and environmental pollution.* Some were able to explain the usefulness of fossil fuels and how fossil fuels can be instruments of environmental destruction without relevant conclusion. Some managed to provide correct introduction of fossil fuels, explain partially usefulness of fossil fuels and the way they can act as instruments of environmental destruction. Some were able to provide partial introduction of fossil fuels, explain the usefulness of fossil fuels and how the fuel can be instruments of environmental destruction with relevant conclusions. Others were able to provide correct introduction of fossil fuels, explain the usefulness of fossil fuels and the way fossils fuel can be instruments of environmental destruction with partial conclusion. Extract 6.1 indicates such a good response.

## Extract 6.1

|   |   |  |
|---|---|--|
| 6 | <p>A fuel is any resource that gives out energy when burnt. Fossil fuels are materials made up from decomposed dead organic matter from 'pre-existing life, that was cemented and put under extreme conditions of pressure and temperature to form either coal or oil. Coal, oil and gas are the most known major fossil fuels. Some of the countries that use these fuels as energy sources are like United States of America, Germany, Russia and Tanzania.</p> <p>Fossil fuels are a great energy resource for economic development. This is because of their wide advantages and use. These are such as follows.</p> <p>Fossil fuels help provide fuels for running and powering Industrial activities in many nations. fuels such as oil provide energy that is used as an energy source for running machinery used in factories, such as lights, electronic equipments and others. An example is the manufacturing industries in Germany, which use coal as an energy source.</p> <p>Fossil fuels also provide energy needed for transport facilities such as ships, motor vehicles and airplanes. All these transport facilities can be used for promoting trade activities as well as tourism activities that will help generate income and profits for the nation, in the longrun. An example of such is in Tanzania, which imports oil so as to supply energy to vehicles and other facilities used for transportation which help promote smooth flow of raw materials and finished goods</p> |  |
|---|---|--|

6

fossil fuels are a major raw material used in petro-chemical industries for production of various products. Oil is used in the manufacture of dyes used in cloth production industries.

Also the wastes from oil are used as a raw material in road construction as bitumen and asphalt, which are black material used to construct roads. Also some industries use coal to produce coking oil which is used in local homes and other industries. In the longrun, coal is used as raw material for many industries and oil, which lead to production of goods for consumption and thus generating income to promote economic development

fossil fuels extraction is a great source of employment to the nations that extract these fuels. The population gets direct employment as skilled and unskilled labour used in mining of fossil fuels such as oil, gas and coal in countries such as China, Tanzania, South Africa. Through employment, these people will earn incomes which will help promote their living standards and economic status at individual levels. At a national level, the nation can sell fossil fuels in world markets and get foreign money. An example is Iran that earns money by selling oil

fossil fuels, apart from being a major factor for economic development, its extraction has brought about some negative impacts such as the following:

The burning of fossil fuels from industries motor vehicles and other machinery has led to increase in emissions of greenhouse gases which

|   |  |
|---|--|
| 6 | <p>have caused catastrophic impacts on the environment such as global warming which is the increase in atmospheric temperature. Also other impacts from these fuels is the increase of acids in the atmosphere that lead to the formation of acid rains when the acidic gases get dissolved in water droplets that fall down in forms of rain.</p> <p>The extraction of fossil fuels has led to an increase in the rates of air pollution due to increase in concentrations of particle matter such as smoke from the combustion of coal. The accumulation of smoke in the air has resulted to decreased visibility, and also many plants get affected by smoke particles since they block the stomata on the leaf surface, once they fall on the leaves and as a result plants fail to manufacture their food.</p> <p>Deforestation has also resulted from the extraction of fossil fuels, majorly being coal. Coal is extracted by opencast method or shaft method. The use of open cast method involves clearing of all vegetation that was present on the area before, and while extraction continues, this causes a great loss of forests which later on leads to soil erosion because the loose soil will be easily eroded by agents of erosion such as wind and water.</p> <p>Fossil fuels have caused the loss of biodiversity in both plants and animals due to activities that involved cutting down vegetation and oil spills from oil rigs that caused the deaths of many fish and aquatic living organisms. The</p> |
|---|--|

Extract 6.1 shows a sample of a candidate who attempted the question relatively well. He/she provided a correct introduction, provided the usefulness of fossil fuel and the way fossil fuel are instruments of environmental destruction. His/her conclusion shows high level of critical analysis.

Furthermore, the candidates who scored from 7 to 11.5 marks had moderate knowledge on the concept of sustainable use of fuel and power. The variation of their marks was due to the strengths and weaknesses of individual candidates. For instance, some candidates were able to give correct introduction of fossil fuels, explained partially a few usefulness of fossil fuels and the way they can be instruments of environmental destruction without relevant conclusions. Some failed to give correct introduction of fossil fuels, explained partially a few usefulness of fossil fuels but failed to explain the how fossil fuel can act as instruments of environmental destruction and relevant conclusion. While others managed to provide correct introduction of fossil fuels, failed to explain usefulness of fossil fuels but managed to explain the way how they can act as instruments of environmental destruction.

The candidates who scored from 1 to 6.5 marks lacked focus on the subject matter. For example, some candidates managed to give correct introduction of fossil fuels but failed to explain the usefulness of fossil fuels and the way they act as instruments of environmental destruction. and Some were able to give partial introduction of fossil fuels; managed to explain a few usefulness of fossil fuels but failed to explain the way they can be used as instruments of environmental destruction without relevant conclusion. While others were not able to give introduction of fossil fuels, fail to explain usefulness of fossil fuels but managed to explain the way how can be instruments of environmental destruction. Therefore, the variations of candidates scores in this category emanated from the fact that the candidates had diverse strengths and weakness in responding to the question.

On the other hand, the candidates who scored a 0 mark manifested ignorance of the concept of sustainable use of fuel and power. Thus, it was obvious the candidates failed to provide relevant definition of fossil fuels, failed to explain the eight usefulness of fossil fuels and the way can act as instruments of environmental destruction. For example, one candidate provided a wrong introduction and provided wrong usefulness of fossil fuels such as: *it helps in improvement of science and technology, it is easy to be controlled, it is affordable, and it improves the social services in the country.* They also failed to explain how fossil fuel can be instruments of

environmental destruction by providing answers like: *it is difficult to be obtained or stored, its availability to be found is very low, it provide soot to the environment and it led to spread of diseases*. Extract 6.2 shows a sample of candidate with poor answers.

## Extract 6.2

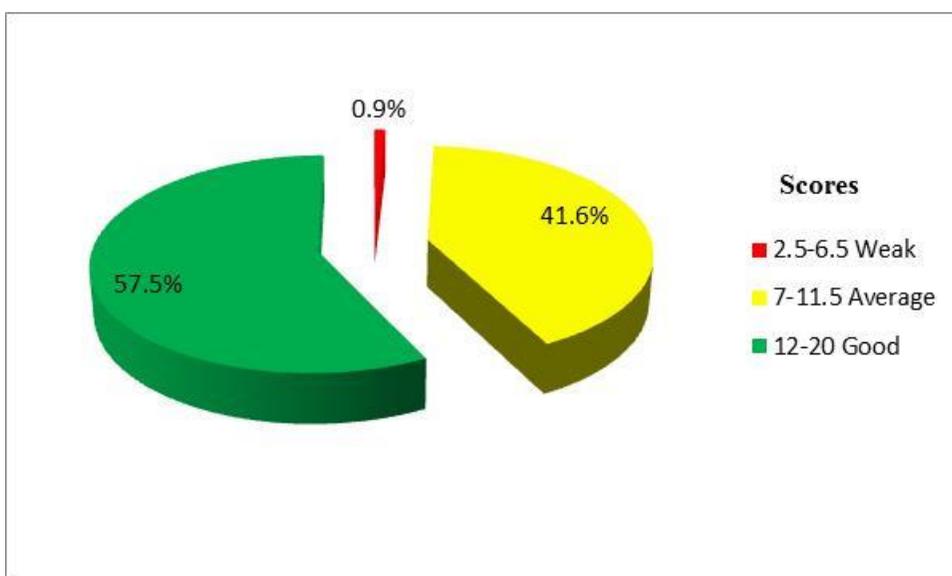
|    |  |  |
|----|--|--|
| 6. | <p>"Fossil fuel are both energy resources for economic development and instruments of environment destruction"</p>   |  |
|    | <p>Fossil: Are the remains of <sup>an</sup> organisms while fuel is the energy from different source</p>   |  |
|    | <p>The following are the advantages of fossil fuel for economic development :</p>  |  |
|    | <p>It helps in improvement of science and technology. This is where by people can able to modify and transfer to another form which can helps them for future use or different activities</p>  |  |
|    | <p>It is affordable: Due to this every people can afford to buy and use for his/her own purposes which can be benefit for the government due to its productivity</p>   |  |
|    | <p>It is easy to be controlled: Through this avoid the environmental pollution <del>the</del> Compare to other source of energy which are being used by people</p>   |  |
|    | <p>It improve the social services of people in the country. Due to this people can able to get employment opportunities where by they can able to afford their needs and requirement which are supposed for every individual to have like (Food, clothes, and shelter)</p> |  |
|    | <p>The following are the instruments of environmental destruction mean disadvantages :</p>   |  |
|    | <p>It is difficult to <sup>be</sup> obtainable to <sup>be</sup> stored: Through this point this kind of energy can not be able to be stored because to their quality and quantity compare to other gases</p>   |  |
|    | <p>Its availability to be found is very low: Through this other <sup>(fuel)</sup> gases are easily to be found and well organized compare to this where by fossils are hard to be found</p>  |  |
|    | <p>It produce <del>rocks</del> to the environment &amp; After being used it destruct the environment and lead to the pollution on the earth's surface and cause destruction of the earth or ozone layer</p>  |  |
|    | <p>It lead to spread of diseases: Through this there are some disease erupt due to this (gas) fuel which caused by the root of the fuel disease like TB (Tuberculosis), cough etc. this destruct respiratory system of a human being as well as organisms.</p>             |  |
|    | <p>Therefore Fossil fuel has got a disadvantages and advantages, every thing has got its achievements and failure so the government should support people by applying methods and techniques to use this "fossil fuel".</p>  |  |

Extract 6.2 is a sample of a candidate's poor responses. He/she provided wrong introduction and usefulness of fossil fuel such as improvement in technology is affordable, easy to control, improve social services and he/she failed to state how fossil fuel can be instruments of environmental destruction. The candidate ended up with an irrelevant conclusion.

### 2.2.7 Question 7: Manufacturing Industries

The candidates were instructed to analyse eight factors which influence the location of an industry with concrete examples.

The question was popular, about 94 percent of the candidates attempted the question. It was the best performed question in Geography paper. 57.5 percent scored from 12 to 20 marks, 41.6 scored from 7 to 11.5 marks, 0.9 percent scored from 2.5 to 6.5 marks. The general performance in this question was good as 99.2 percent of the candidates scored 35 marks and above. Figure 7 below illustrates the performance.



**Figure 7:** Trend of Candidates' Performance in Question 7

The candidates who scored from 12 to 20 marks were able to convey the subject matter well. The ideas were well presented and consistently related to the question. The essays were well structured with cohesive paragraphs and did flow well. For example, some candidates were able to give correct introduction which ensured that they answer the question asked. They analysed eight factors which influence the location of an industry with high level of critical analysis, including different points of view which were relevant such as: *availability of raw materials, power of fuel, transport facilities, labour supply, capital, market and government support*. The

candidates provided relevant conclusions which included clear summary of key points. Extract 7.1 is a sample of such a good response.

### Extract 7.1

|    |   |
|----|---|
| 7: | Industry refers to the place where goods are manufactured like Textile Industry in china and Ship Industry in Italy. Also industry means a specific field as in music industry and movie industry which support the growth of any country economy. The following are the factors influencing the location of an industry in any place :-  |
|    | Availability of raw materials; this is the major factor for Industry location where as Industries needs raw materials to process as to produce goods. Hence, an industry has to be located in area where the raw material needed is available. Forexample; If the textile industry has to be located, it should be near raw materials that supporting its function like cotton and Fibre. |
|    | Availability of water; also water is a very essential for the location of industry as water has many role to the development. First, they are used for cleaning materials like Diamonds and second for cooling Industrial machines as to promote its efficient. Thus location of industry has to be in areas near water bodies like Rivers, Lakes or Ocean.                               |
|    | Availability of Enough labour; also the presence of enough labours in an area is among the factors for the location of Industrial. Industry has to employ many personnel to perform different tasks in the process of manufacturing goods. Forexample; china has well developed Economy contributed much by the presence of Industries as their   |

|   |  |
|---|--|
| population is very high compared to other-        |  |
| Availability of capital; also for                 |  |
| the location of industry in most places there has |  |
| to be good and reliable capital to construct,     |  |
| develop and run industrial activities. That's     |  |
| why most developing countries have low level of   |  |
| Industries as there is no capital to support      |  |
| technological advancement. Forexample USA is      |  |
| developing fast due to the issue of capital.      |  |
| Presence of Good infrastructure                   |  |
| also if the area is characterized with good       |  |
| infrastructure like Roads, harbours and railway   |  |
| it attracts the location of industries compared   |  |
| to places with no good infrastructure. Good and   |  |
| advanced transport (infrastructure) make it easy  |  |
| for the transportation of Raw materials, labors   |  |
| and good transportation to the market or Trade.   |  |
| Availability of Local and Exte-                   |  |
| rnal market; another factor for the location      |  |
| of industry in an area is the presence of local   |  |
| and external market. Forexample; If the demand    |  |
| of cars in an area is high then it's a good       |  |
| reason for the location of Industries in a place. |  |
| Thus if there is no the local market between      |  |
| people around and lack of External demands        |  |
| then there's no need for Location of industry.    |  |
| Furthermore, the issue of energy                  |  |
| supply; also Energy play a great role in the      |  |
| development of industries as the machines         |  |
| operated are run by Energy source such like       |  |
| Electricity either from the Generation of         |  |
| Hydro Electric Power or Nuclear or wind or        |  |

|   |  |
|---|--|
| Biogas for the light industries thus a reason.        |  |
| Moreover, the location of industry                    |  |
| can be promoted in areas with political               |  |
| stability; this can also influence the location       |  |
| as to why Somalia has no many industries. The         |  |
| industry has to provide employment and to manufacture |  |
| goods means if there is political instability people  |  |
| will be busy fighting instead of manufacturing hence  |  |
| collapse of Industries.                               |  |
| In a nutshell, Industries can impact the              |  |
| environment as they led to environment pollution      |  |
| interms of Air pollution and water pollution.         |  |
| Also they cause Defforestation, Land degradation      |  |
| and loss of biodiversity due to vegetation clearance. |  |
| Also industries led to the Green house effect.        |  |

Extract 7.1 shows a candidate who mastered the subject matter well and presented the ideas consistently well. The essay is relatively well structured with cohesive paragraphs and a good flow. His/her conclusion shows high level of critical analysis.

Furthermore, the candidates who scored from 7 to 11.5 marks showed moderate mastery of the concept of manufacturing industries especially on location of industries. For example, some candidates were able to provide an introduction of industries, analysed partially eight factors which influence the location of an industry without concrete examples but provided relevant conclusions. Some managed to give an introduction of industries, analysed a few factors which influence the location of an industry with concrete examples and relevant conclusions. While others provided partial introduction of industries, analysed partially factors which influence the location of an industry with concrete examples without relevant conclusions.

On the other hand, the candidates who scored from 2.5 to 6.5 marks failed to transfer the knowledge they learnt in the classroom situation but were able to master a certain amount of ideas. For example, one candidate provided poor a introduction which in turn led to partial analysis of the factors which influence the location of an industry, of which some factors were correct and others were wrong. such as: *low population, area with forest, climate, location which won't disturb human activities, place where there are some geographical features, temperature of the area, pressure and wind blowing*. The candidate ended up with irrelevant conclusion. Extract 7.2 shows a candidate who performed poorly in this question.

## Extract 7.2

|   |  |  |
|---|--|--|
| 7 | <p>Industry; This is the one of the machines that are used to produce a certain goods that are beneficial to the people and the country for increasing development and improving other peoples life by providing them employment opportunities / job opportunities.</p> <p>The following are the factors that influence the location with / or of industry.</p> <p>Large area or Large area with a lot of hectares; Large areas are the best location to start a industry areas with huge amount of land is favourable in supporting the industries that can be the great help to the people and will use to increase the income of the nation. And also will provide employment opportunities to the people. Example of these areas are like places near mountains that they cover large areas.</p> |  |
|---|--|--|

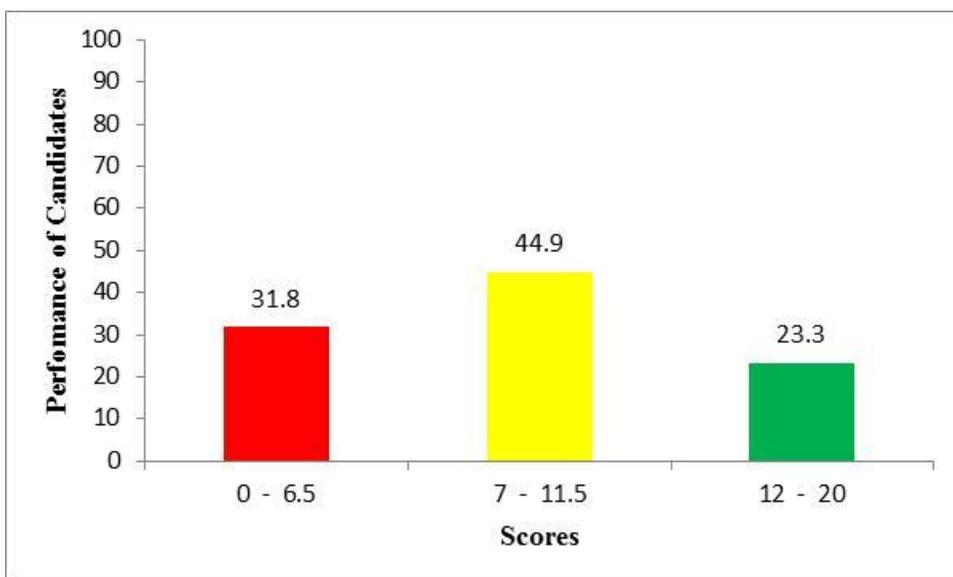
|   |   |
|---|---|
| 7 | <p>Location where there is low population; Industries must be located in areas where there is low population because if you open an industry at town, it will affect the people by the wastes that will be produced and will be harmful to man and smoke produced by the industries, which is not good for the health of the people.</p> <p>Vegetation; Industries prefer areas with forest that they will help against the destruction of atmosphere that's why you must cherish the vegetation and the vegetation should be favourable for the industry and its surroundings.</p> <p>Climate; they should check the climate where it can support and manage the condition of the industries. There are areas which can not support industries areas which have land degradation you can not build industry at that location because as we know land degradation is a problem so you just check the location.</p> <p>Location which won't disturb human activities; like the location must be favourable that the location of the industry must obey human activities like plantations, areas where people do irrigation for their development of their lives should not be disturbed by the location of industry.</p> <p>Location where there are some geographical features; There are the best location for the industries where there are physical features like mountains. It reduces the destroying of ozone layer and reduce the destruction of atmosphere that's why most of the country they complain about industries that they lead to the destruction of atmosphere.</p> |
|---|---|

|   |  |  |
|---|--|--|
| 7 | <p>Temperature; In locating the industry we must check the temperature of a specific place this may help in reducing the effect on that place <del>later</del> where the industry will be opened in a region with high temperature it will cause the problem of adding temperature and it won't even support like the organisms.</p> <p>pressure; they must check the pressure at the location the temperature of a particular place also you can find that the pressure of that place does not allow the construction of the industry. so pressure must.</p> <p>Wind blowing; must check the wind blowing of a particular place whether it is favourable for the construction of the industry or it will not but work with the statistics of every location to know its problems.</p> <p>By concluding I am conclude by saying when people or the government wants to open an industry they must check on every matter and is connected with the area where people lives that it should be favourable to them and must check the vegetation, climatic condition Temperature, pressure, wind blowing of a particular area to see if they are favourable for the location of the industry</p> |  |
|---|--|--|

Extract 7.2 represent a sample of a candidate who failed to perform well. He/she provided wrong a introduction and mixed relevant and irrelevant factors which influence the location of an industry such as large area, low population, climate, vegetation, geographical features and the candidate provided irrelevant conclusion.

### 2.2.8 Question 8: Transport and Communication

This question required the candidates to analyse four advantages and four disadvantages of railway transport. The question was opted for by 53.9 percent of all the candidates of which 23.3 scored from 12 to 20 marks, 44.9 scored from 7 to 11.5 marks, 31.6 percent scored from 0.5 to 6.5 marks, 0.2 percent scored a 0 mark. The general performance in this question was good as 68.2 percent of the candidates scored 35 marks and above. Figure 8 below illustrates the performance in this question.



**Figure 8:** Trend of Candidates' Performance in Question 8

The candidates who scored from 12 to 20 marks had good knowledge and skills on the concept of transport and communication especially on railway transport. The strengths and weaknesses of the candidates responses led to variations of marks from 12 to 20. For example, some candidates were able to give correct introduction of railway transport, they analysed four advantages of railway transport such as: *railway transport passengers, more load and passengers are transported in a single journey, railway operating cost is very low and it's not affected with a traffic jam*. They analysed four disadvantages of railway transport such as: *railways are expensive to build, it is not flexible like road transport, it is not suitable for*

*commodities which are perishable and they lead to environmental pollution* and provided relevant conclusions. While others provided partial introduction of railway transport, analysed four advantages and four disadvantages of railway transport partially. Extract 8.1 is an example of such good responses.

## Extract 8.1

|    |  |
|----|--|
| 8. | <p>Land transport is categorised into animal portage, human transport, road and railway transport. Therefore, Railway transport is a type of land transport that uses train passing through rails in order to transfer people, goods, their animals and services from one point to another. The creation of railway transport has however been of benefit in one way or the other. Some of the advantages of railway transport are mentioned below:-</p> <p>It is essential in carrying bulky goods especially over long distances; compared to other types of transports the railway transport is the most reliable in carrying bulky goods such as coal, food and army weapons at large quantities that too for very long distances without incurring damages such as those on vehicles or tiredness of animals and human beings. Example, India transports its coal over long distance using railway transport.</p> <p>It doesn't encounter congestion problems; the railway transport is direct, making stops only at stations or on emergency stops, also no train would get into congestion with another like the case of road transport. Each train has its route way at a specified time hence no congestion; thus low risk of accidents.</p> <p>It has large carrying capacity; unlike other <del>road</del> land transportation types and all other types of transports, railway transport has the ability of carrying more than 2000 passengers together with other goods all at once without encountering much problems. This saves time and reduces</p> |
|----|--|

It is a cheap means of transport; the railway transport does not cost a lot of money since most people are able to use it as in most cases such as in Tanzania, it involves classes whereby each class has its own payment amount which can accommodate the richest and poorest people without interference. It is also cheaper compared to other types of transports in accordance to distance factor.

The railway transport doesn't only have advantages but also disadvantages. Some of these disadvantages of railway transport are mentioned below:

It is limited to areas with railways only; the railway transport is specifically for trains to pass through the prepared way, that is the rails, thus it is impossible to conduct the transport system in areas with absence of the important requirements unlike road, human and animal transports which do not require specific routes.

It is not suitable for transporting perishable and delicate goods; goods such as food stuffs especially naturally made, or cultivated, such as tomatoes and vegetables also delicate goods like glass materials are not to be transported through railway transport since it may take longer time making goods to perish or disturbances, such as corners and other train movements may lead to the breaking of the delicate goods.

It is expensive to establish railway transport; the railway transport requires experts and machines to construct, also large capital invested so as to have access to the materials used in construction of the rails since they are expensive as they are of specific types also for very long distances. This is a main problem encountered by developing countries such as Tanzania.

Extract 8.1 represents a sample of a candidate who attempted the question well. He/she provided relevant introduction, provided advantages and disadvantages of railway transport.

Furthermore, the candidates who scored from 7 to 11.5 marks revealed that they were reasonably conversant with the concept of transport and communication especially railway transport. However, they were not able to score above 11.5 marks due to lack of an in depth and broad scope of the topic coverage, giving generalizations, and lacking in specifics. For example some candidates were able to provide good introduction of railway transport as: *railway transport involves the carrying of goods and passengers by train*. They analysed a few advantages of railway transport such as: *It is not affected with traffic jam, It is less affected by unpredictable weather conditions if it is well constructed* and few a disadvantages of railway transport such as: *The railways are expensive to build, It is not suitable for commodities which are perishable like milk and vegetables*. Majority in this group ended their essay with relevant conclusions.

The candidates who scored from 0.5 to 6.5 marks implied that they were not competent with the concept of transport and communication especially on railway transport. Whereas, this was a very popular question, the majority of candidates in this range of marks lacked focus. Instead of delineating broadly on the railway transport some focused on the general concept of transport and communication, which was a much narrower perspective and as a result they failed to score higher marks. For example, some candidates were able to provide correct introduction of railway transport but failed to analyse four advantages and four disadvantages of railway transport as they mixed up with the general importance of transport and communication such as: *creation of employment, more load and greater number of people can be transported at a single journey, source of government revenues, it promote international relation*.

The candidates who scored a 0 mark failed to address the demand of the question by giving generalizations and lacking in specifics. Their explanations were not clear, or lacked depth and scope of coverage. Many candidates did not, however, understand that the question was specific on the railway transport. Thus, they provided incorrect introduction of railway transport, failed to analyse four advantages and four disadvantages of railway transport and they provided wrong conclusion. For example one candidate failed to define railway transport. He/she provided wrong

advantages of railway transport such as: *it leads to international cooperation, increase of government revenue, growth of towns and cities and makes goods available when they are demanded*. The candidate provided wrong disadvantages of railway transport such as: *loss of human power, increase in terrorism, cause accident and destruction of culture*, and ended up with irrelevant conclusion. Extract 8.2 is a sample of a poor response from a candidate.

## Extract 8.2

|    |   |
|----|---|
| 8. | <p>Transport is the process where by people and goods move from one place to another. Transport categories into three types which are, land transport, water transport and air transport also in this way there are major means of transport or way of transport are like car, aeroplane, ship and train, transport have the following advantages to the people:-</p> |
|    | <p>Employment opportunity, due to the fact that many people will be employed either on constructing, cleaning an area around the railway and those captain of controlling a train hence gives people employment opportunity. For example rail way from Zambia to Dar-es-salaam in Tanzania have employed more than 15,000 people.</p>                                 |
|    | <p>Improving standard life of people this is due to the fact that people will get money during working on this railway where money will help them on building up houses and good food supplies to their houses.</p>   |
|    | <p>Helps on improving social service like hospital, schools and offices, this is due to the fact that due to collection of money through this sector will help to offer services to be improved, like provision of medicine in hospitals and good facility for studying, books and laboratory for conducting experiment.</p>  |

|    |  |  |
|----|--|--|
| 8. | <p>Increase good relationship, of either countries or people in general from one country to another. For example people move from Zambia to Tanzania through railway which simplify the contact of people and conduct different activities like trade.</p>   |  |
|    | <p>improve the development of other sector like Agriculture, tourism and fishing due to the factor that, when railway transport will be supplying high income to the national eco. will lead other money to be bought either tractor for agriculture activities and provide to the farmer.</p>   |  |
|    | <p>The following are the disadvantages of railway transport:</p>   |  |
|    | <p>Loss of man power, this is due to the fact that, when accidents appears for example in 2000 Tanzania lost about 1,000 people including man-power which are needed by the country hence affect the nation in general.</p>  |  |
|    | <p>Increase terrorism, this is due to the fact that this way some time pass in the forest area according to the location of the pathway hence better increase on catching people when they reach to the forest area. For example in Brazil there was a problem of terrorism in 1996 a train was taken about 1,3450 people were caught.</p> |  |

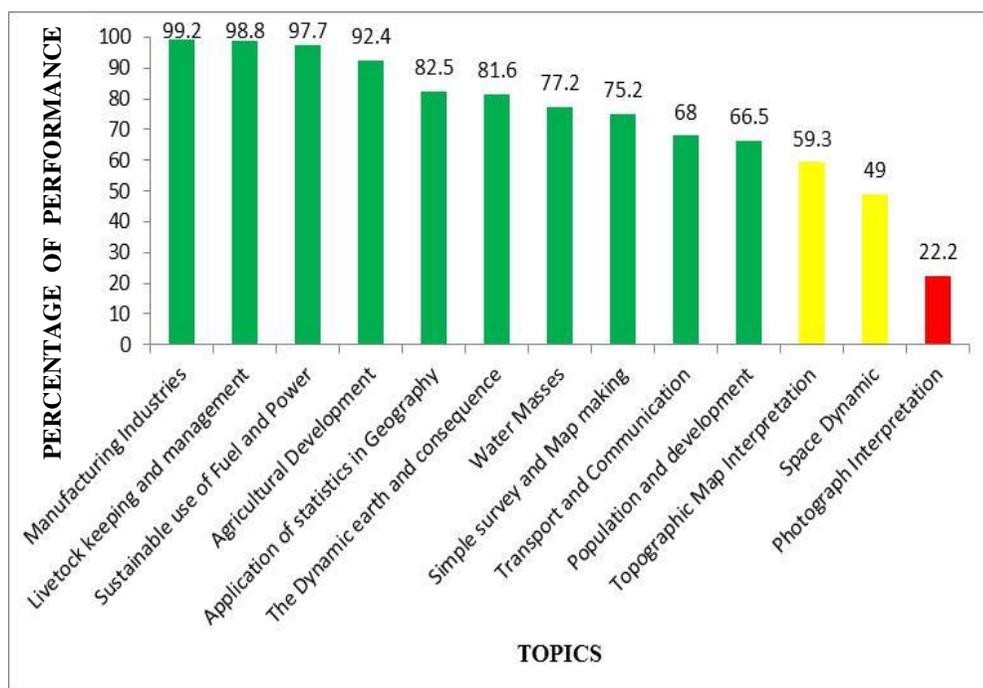
Extract 8.2 represents a sample of a candidate who provided generalised answers on the importance of transport and communication such as: provide employment, improving standard of living, improving social services etc, instead of advantages and disadvantages of railway transport.

**SUMMARY OF THE QUESTIONS ANALYSIS IN GEOGRAPHY PAPER  
ACSEE 2017**

| S/N | DEGREE OF PERFORMAMNCE           | GEOGRAPHY 1<br>QUESTION<br>NUMBER |   |   |   |   | GEOGRAPHY 2<br>QUESTION NUMBER |   |   |   |   |   |   |
|-----|----------------------------------|-----------------------------------|---|---|---|---|--------------------------------|---|---|---|---|---|---|
| 1   | <i>Well done Questions</i>       | 2                                 | 3 | 5 | 6 | 7 | 9                              | 1 | 4 | 5 | 6 | 7 | 8 |
| 2   | <i>Moderate done Questions</i>   | 1                                 |   |   |   |   |                                | 2 | 3 |   |   |   |   |
| 3   | <i>Poorly done Questions</i>     | 4                                 | 8 |   |   |   |                                |   |   |   |   |   |   |
| 4   | <i>Most attempted Questions</i>  | 1                                 | 2 | 5 | 7 |   |                                | 1 | 3 | 5 | 7 |   |   |
| 5   | <i>Least attempted Questions</i> | 3                                 | 4 | 8 |   |   |                                | 2 | 6 |   |   |   |   |

### 3.0 PERFORMANCE OF CANDIDATES IN EACH TOPIC

The analysis of candidates' performance in each topic shows that, candidates had *good* performance in 10 topics out of 13 as they scored 35 marks and above; these topics were:, *Manufacturing Industries* (99.2%), *Livestock Keeping and Management* (98.8%), *Sustainable use of Fuel and Power* (97.7%), *Agricultural Development* (92.4%), *Application of Statistics in Geography* (82.5%), *The Dynamic Earth and Consequence* (81.6%), *Water Masses* (77.2%), *Simple Survey and Map Making* (75.2%), *Transport and Communication* (68%), *Population and Development* (66.5%), On the other hand, two topics had an average performance. These topics were *Topographic Map Interpretation* (59.3%) and *Space Dynamic* (49%). *Photograph Interpretation* had weak performance (22.2%). See figure below and *appendix*).



## **4.0 CONCLUSION AND RECOMMENDATIONS**

**4.1** As it has been observed in the analysis of questions, the performance in the Geography subject for Advanced Certificate of Secondary Education Examination (ACSEE) 2017 was good. The analysis shows that the candidates' good performance was caused by the ability of the candidates to identify the demand of the questions, candidates' sufficient knowledge on the subject matter and proficiency in the English language as well as computation and drawing skills. However, the candidates with weak performance revealed lack of these skills.

### **4.2 RECOMMENDATIONS**

Basing on the observation made through the Candidates' Item Response Analysis (CIRA) report, in order to improve the performance of prospective candidates in this subject, the following are recommended.

- a) Graph drawing skills needs to be improved. The graphs need to be specific as the syllabus instructs. Therefore, teaching graphs, the skills of data collection and classification, building relations between variables, and showing these relations through graphs should be focused on so as to have students make sense of and ensure easy data interpretation.
- b) Teachers should endeavour to teach the students to avoid generalisation while answering the questions. This has been observed in some candidates responses which were too general instead of being specific. Reference is made on question like question 8 in paper 2 whereby some candidates explained the advantages and disadvantages of transport and communication instead of being specific to railway transport as the question demanded. Likewise in question 3 in paper 2 candidates were lacking in specifics. Instead of explaining about population policy of Tanzania, some of their responses were too general.
- c) Teachers should guide students to go through all the topics across the Advanced Geography Syllabus so as to make exhaustive

revision in order to equip them with knowledge and skills that are needed in answering examination questions. There was evidence from the analysis of each question to suggest that some aspects were not adequately covered, as a result candidates provided scanty information.

- d) The activities outside the classroom should be encouraged and promoted. In geography, a student learns better if the teaching is supported by concrete and objective materials that give the student first-hand knowledge and experience. For example, when teaching field work a trip to a riverside, a visit to a factory, a forest, some specimen of seeds, fruits or vegetables, rocks and minerals would form concrete illustrations in geography lesson and will improve students' performance.
- e) Students and teachers should be encouraged to use English language regularly so as to improve their language skills. This can be done through various ways including the practices of speaking English inside and outside the classrooms, during their group discussions as well as the introduction of essay writing competitions in schools.
- f) Teachers should guide students to gain skills on how to answer examination questions paper as well as arranging their answers in a proper way.

**COMPARISON OF CANDIDATES' PERFORMANCE IN TOPICS  
BETWEEN YEAR 2016 AND 2017**

| S/N | Topic   | 2016                          |  |         | 2017                          |  |         |
|-----|---|-------------------------------|--|---------|-------------------------------|--|---------|
|     |   | Number of questions per topic | Percentage of Candidate who scored an average of 35 percent or above | Remarks | Number of questions per topic | Percentage of Candidate who scored an average of 35 percent or above | Remarks |
| 1   | <i>Manufacturing Industries</i>               |                               | -  |         | 1                             | 99.2   | Good    |
| 2.  | <i>Livestock keeping and management</i>       | 1                             | 98.8   | Good    | 1                             | 98.8   | Good    |
| 3.  | <i>Sustainable use of Fuel and Power</i>      | 1                             | 89.4   | Good    | 1                             | 97.7   | Good    |
| 4.  | <i>Agricultural Development</i>               | 1                             | 98.4   | Good    | 1                             | 92.4   | Good    |
| 5.  | <i>Application of statistics in Geography</i> |                               | -  | -       | 1                             | 82.5   | Good    |
| 6.  | <i>The Dynamic earth and consequence</i>      | 2                             | 81.5   | Good    | 1                             | 81.6   | Good    |
| 7   | <i>Water Masses</i>                           | 1                             | 98.4   | Good    | 3                             | 78.7   | Good    |
| 8.  | <i>Simple survey and Map making</i>           | 1                             | 82.7   | Good    | 1                             | 75.2   | Good    |
| 9.  | <i>Transport and Communication</i>            | 1                             | 92.7   | Good    | 1                             | 68   | Good    |
| 10. | <i>Population and development</i>             | 3                             | 88.9   | Good    | 3                             | 66.5   | Good    |

| SN  | Topic                                 | Number of questions per topic | Percentage of Candidate who scored an average of 35 percent or above | Remarks | Number of questions per topic | Percentage of Candidate who scored an average of 35 percent or above | Remarks |
|-----|---------------------------------------|-------------------------------|--|---------|-------------------------------|--|---------|
| 11. | <i>Topographic Map Interpretation</i> | 1                             | 93.7   | Good    | 1                             | 59.3   | Average |
| 12  | <i>Space Dynamic</i>                  | 2                             | 74.5   | Good    | 2                             | 45.4   | Average |
| 13  | <i>Photograph Interpretation</i>      | 1                             | 93.7   | Good    | 1                             | 22.2   | Weak    |

