



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



**CANDIDATES' ITEMS RESPONSE ANALYSIS (CIRA)
REPORT FOR THE ADVANCED CERTIFICATE OF
SECONDARY EDUCATION EXAMINATION
(ACSEE) 2020**

113 GEOGRAPHY



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



**CANDIDATES' ITEMS RESPONSE ANALYSIS (CIRA)
REPORT FOR THE ADVANCED CERTIFICATE OF
SECONDARY EDUCATION EXAMINATION (ACSEE)
2020**

113 GEOGRAPHY

Published by

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

©The National Examinations Council of Tanzania, 2020

All rights reserved

TABLE OF CONTENTS

FOREWORD.....	iv
1.0 INTRODUCTION.....	5
2.0 ANALYSIS OF THE CANDIDATES' PERFORMANE IN EACH QUESTION.....	6
2.1 113/1 GEOGRAPHY PAPER ONE	6
2.1.1 Question 1: Topographic Map Interpretation	6
2.1.2 Question 2: Field Research Strategies	16
2.1.3 Question 3: Simple Survey and Map Making	21
2.1.4 Question 4: Space Dynamics.....	27
2.1.5 Question 5: Position, Behaviour and Structure of the Earth	31
2.1.6 Question 6: Water Masses.....	38
2.1.7 Question 7: Study of Soils.....	42
2.2 113/2 GEOGRAPHY PAPER TWO.....	50
2.2.1 Question 1: Population and Development.....	50
2.2.2 Question 2: Population and Development.....	57
2.2.3 Question 3: Environmental Friendly Tourism.....	58
2.2.4 Question 4: Manufacturing Industries	67
2.2.5 Question 5: Transport and Communication	74
2.2.6 Question 6: Sustainable Use of Fuel and Power	80
2.2.7 Question 7: Sustainable Mining	86
3.0 PERFORMANCE OF CANDIDATES IN EACH TOPIC.....	93
4.0 CONCLUSION	93
5.0 RECOMMENDATIONS	94
<i>Appendix</i>	95

FOREWORD

The report on the Candidates Item Response Analysis (CIRA) for the 2020 Advanced Certificate of Secondary Education Examination (ACSEE) for the Geography subject has been prepared by the National Examinations Council of Tanzania (NECTA). The aim of this report is to provide feedback to different education stakeholders including students, teachers, parents, policy makers and the general public on the performance of candidates and the extent to which the instructional goals and objectives were met.

The ACSEE marks the end of the two years of the advanced level of secondary education. It is a summative evaluation that shows the general effectiveness of the education system. Principally, candidates' responses to the examination questions indicate what the education system was able/unable to offer to the students in the two years of the Advanced Certificate of Secondary Education.

In this report, the analysis of each question has been done and some statistical data has been presented in figures and graphs. Factors that have contributed to the candidates' ability to answer the examination questions correctly and score high marks include: the ability to understand the demands of the questions, having basic knowledge of the subject matter, possessing skills in computing and drawing, good mastery of the English language and essay writing skills. The candidates who scored low marks depicted contrary attributes.

It is the belief of the National Examinations Council of Tanzania that, this report shall serve as a basis for enabling all educational stakeholders, including; education administrators, school managers, teachers and students, to identify proper measures to take in order to improve candidates' performance in future examinations administered by the Council.

Finally, the National Examinations Council of Tanzania is grateful to all Examination Officers and other stakeholders who provided valuable assistance in the preparation of this report.



Dr. Charles E. Msonde
EXECUTIVE SECRETARY

1.0 INTRODUCTION

The 2020 Advanced Certificate of Secondary Education Examination (ACSEE) in Geography subject covered the 2010 syllabus and adhered to the 2019 Examination Format (Revised version). The examination consisted of two papers; 113/1 Geography 1 and 113/2 Geography 2.

Paper one consisted of two sections; A and B. The candidates were required to attempt five questions. Section A had three questions from the following topics: Topographic Map Interpretation, Field research Strategies, Simple Survey and Map Making. The candidates were required to attempt two questions from this section. Question number 1 was compulsory. Section B had four questions which were set from the following topics: Space Dynamics, Position Behaviour and Structure of the Earth, Water Masses and The Study of Soils. The candidates were required to attempt any three questions from this section.

Paper Two consisted of seven questions from the following topics: Population and Development, Environmental Friendly Tourism, Manufacturing Industries, Transport and Communication, Sustainable Use of Fuel and Power, Sustainable Mining. The candidates were required to attempt a total of five questions. Question number one was compulsory.

This report analyses the 2020 performance of the school candidates who sat for the ACSEE in Geography subject. In the analysis, the performance in each topic is ranked as weak, average and good if the percentage of candidates' scores lies in the range of 0 to 34, 35 to 59 and 60 to 100 respectively.

A total of 44,269 candidates sat for the ACSEE 2020 in the Geography subject, out of which, 43,942 candidates (99.72%) passed while, 123 (0.28%) failed. Generally, the performance in 2020 improved by 0.2 percent compared to that of 2019, in which, 99.52 percent of the candidates passed and 0.48 percent failed.

This report provides an analysis on the performance of the candidates in each question by showing what the candidates were required to do as well as the strengths and weakness of their responses. Samples of the candidates' answers are shown to illustrate their responses. It is expected that the report will be useful to all educational stakeholders and will enable teachers and students to improve the teaching and learning process in the 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 candidates' ability to grasp and apply knowledge in various situations. It also tests the ability to demonstrate, analyse, reason and interpret various Geographical phenomena such as: physical features, research strategies, survey, map work and draw conclusions from observations and interpretations.

2.1 113/1 GEOGRAPHY PAPER ONE

SECTION A: Topographic Map Interpretation, Field Research Strategies, Simple Survey and Map Making

2.1.1 Question 1: Topographic Map Interpretation

The candidates were required to carefully study the map extract of Kimamba (sheet 182/3) provided and then answer the questions that followed. The question consisted of six parts; (a), (b), (c), (d), (e) and (f). The total marks allocated for this question were 25.

The candidates were required to (a) calculate the area covered by the Sisal Estate in squares kilometres, (b) suggest the type of climate of the area with concrete reasons, (c) find forward and back bearing of Mbwende grid reference 880395 to Tindiga school grid reference 910405, (d) explain three factors which have influenced population distribution in the area, (e) describe the type of drainage patterns shown on the map and (f) identify part of the map which is covered by highlands and then give two reasons for their identification.

The question was compulsory therefore; it was attempted by all candidates (100%) whereby 9.7 percent scored from 15 to 25 marks, 53.5 percent scored from 9 to 14.5 marks and 36.8 percent scored from 0 to 8.5 marks. The general performance in this question was average since 54.2 percent of the candidates scored 9 marks and above. Figure 1 illustrates candidates' performance in this question.

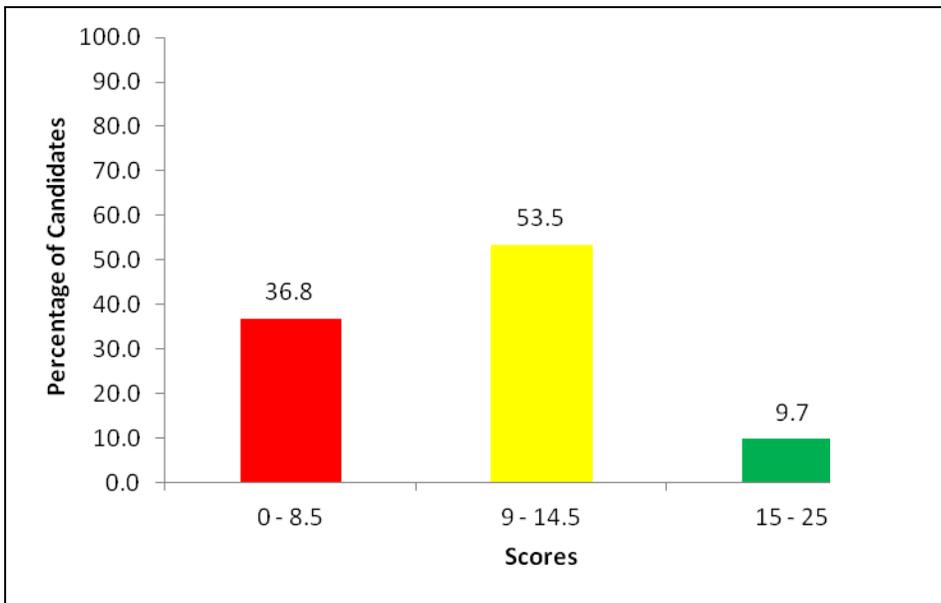


Figure 1: *Candidates' Performance in Question 1*

The candidates who scored from 15 to 25 marks were competent in Topographical Map Interpretation. In part (a), the candidates were able to calculate the area covered by the Sisal Estate in square kilometres. They were also able to follow the procedure and apply correct formula in determining the area whereby in the first step they counted the total number of squares. Complete squares were 11, incomplete squares were $36/2 = 18$, therefore, the total number of squares were 29. In the second step they calculated the area of one (1) square, the length of each side of the square was 2cm, and the map scale was 1:50000, therefore, the area of 1 square is equal to $side \times side = side^2$. This implies that the area of 1 square is equal to $1 km \times 1 km = 1km^2$. Finally they calculated the area of Sisal Estate as $29 \times 1 km^2 = 29 km^2$.

In part (b), most of the candidates managed to suggest the type of climate as *Tropical climate* and the reasons for their suggestions were: *presence of vegetation, scattered trees and woodlands in the area like Kindago, presence of water bodies like seasonal swamp in the eastern part of the map, rivers suggest wet conditions like Miyombo and Kidogo and crops like sisal which suggest moderate rainfall*. Some of the candidates in this category were able to mention the correct type of climate but they mixed the correct and incorrect reasons in their suggestions leading to variation in their scores.

In part (c), some of the candidates identified the forward bearing of Mbwende grid reference 880395 to Tindiga school grid reference 910405 as 71^0 or 72^0

and back bearing of Mbwende grid reference 880395 to Tindiga school grid reference 910405 as 251^0 or 252^0 . Others were able to find the correct forward bearing of Mbwende on the given grid references but failed to find the back bearing.

In part (d), majority of the candidates managed to explain three factors which have influenced population distribution in the area as the population in the area is not evenly (uneven) distributed due to the following factors:

Presence of transport network such as railway and trucks on the western part of the map has influence people to live along the railway line; presence of sisal estate and factory which has attracted people to live around the factory as it is seen in the eastern and western part of the map for example Kivungi town ship; vegetation distribution such as woodland which is found almost all over the map; relief people are settled in the areas that are flat and avoid settling in highland areas and finally water bodies and drainage affect people's settlement as presence of water bodies attracts people to settle.

In part (e), they identified and described the correct drainage patterns shown on the map as dendritic and trellis. They described

The presence of dendritic drainage pattern which was evidenced by the tributaries joining the main river at an acute angle for instance at grid reference 892374 where there is Kidogo river. Presence of trellis drainage pattern was evidenced by the tributaries which join the main river at nearly a right angle at grid reference 802314.

Some of the candidates explained *the presence of centripetal drainage pattern around grid reference 845385, where river streams flow towards the seasonal swamp*. On the other hand, some candidates explained only one drainage pattern.

In part (f), the candidates managed to identify the part of the map which is covered by highlands giving three reasons: *the Western part of the map because; one, closeness of the contours, two the direction of the rivers which seems to flow from the western part and three the presence of hills in the western part of the map marked by hill picks/tops for example at grid reference 795305*. Some of the candidates in this category managed to give the direction of the map covered by highlands without giving any reason which rendered variations in their scores. Extract 1.1 represents a part of such a good response.

1. a)	Number of full square = 13 11	
	Number of half square = 36	
	Number of square = $\frac{11 + 36}{2}$	
	<u>= 29 squares</u>	
	From map scale	
	1 km = 100,000 cm	
	? x = 50,000 cm	
	$x = \frac{1}{2}$ km	
	Area of 1 square in km = $\left(\frac{1}{2} \times \frac{1}{2}\right) \text{ km}^2$	
	= $\frac{1}{4} \text{ km}^2$	
	Also,	
	Area on map of 1 square = 20 cm x 20 cm	
	= 400 cm ²	
	Therefore,	
	1 square = $\frac{\frac{1}{4} \text{ km}^2 \times 400 \text{ cm}^2}{1 \text{ cm}^2}$	
	<u>1 square = 1 km²</u>	
	Then,	
	1 square = 1 km ²	
	29 squares = ?	
	= $\frac{29 \text{ km}^2 \times \text{Squares}}{1 \text{ square}}$	
	Area = 29 km ²	
	<u>∴ Area of Sisal Estate is 29 km²</u>	

1. b)	The type of Climate is Modified Tropical climate, due to the following evidences;
	(i) Presence of water bodies that are moderate. For instance presence of seasonal swamps on Southern part and a river across centre indicates it receives rainfall.
	(ii) Sisal estates. The sisal grows in area that receives enough rainfall hence it indicates an area is intermediate between Tropical and Equatorial.
	(iii) Presence of woodlands scattered on Western and North part of the map indicates area has rainfall and moderate temperature.
c)	Forward bearing = 71°
	Back bearing = $FB + 180^\circ$
	$= 71^\circ + 180^\circ$
	$= 251^\circ$
	\therefore Back bearing = 251°
d)	Population distribution is a way in which people and settlement have spread on a given area. The population distribution on a map is influenced by the following factors,
	Presence of social services. Social provisions have influenced people to settle. Example, presence of DISPENSARY at 828332 and 880317 has led people settle near the areas.
	Presence of river as a source of water. There is few linear settlement, example along the river passing the centre of map which it facilitates water supply.

1. d)	Transport networks. Example, a road runs from grid 815262 to 792390 which has a railway line also
	promotes trading activities. And transport of raw
	materials like Sisal to other places.
	Therefore, population on the given map is not
	concentrated much due to presence of Sisal plantations
	that covered a wide area, and also woodlands which
	do not support settlement of people, hence a sparsely
	population distribution.
e)	Drainage pattern is the layout of river system with
	its tributaries. Some of drainage pattern shown includes,
	Dendritic drainage pattern. It is evidenced on South-
	Western part of map which drains water from westward
	towards the Sisal estate and seasonal swamp. Also on
	Northern at Kidogo stream.
	Trellised drainage pattern. As shown at grid reference
	805318, 802314 which seem to join another stream
	at almost right angle, hence trellised drainage pattern.
	Generally, the area has few drainage which
	indicates moderate rainfall.
f)	The Western part is covered by highlands due to
	the following reasons,
	The direction flow of River Miyoomba. The river
	runs from west part which have contourline of
	540m to eastern part which is covered by the
	Seasonal swamps and has almost flat landscape.
	The contour lines are almost closely on the
	South-West part of map. The side has highest

1.1)	contour 580m and lowest contour 480m while eastern	
	part has no contours shown which means it is plain	
	or gently sloping land.	
	Therefore, the highlands are on western part	
	of the map even though it is not a highly	
	elevated landscape but in relation to other parts of	
	map, western part is highland.	

Extract 1.1: A sample of a correct response to question 1

The candidates who scored from 9 to 14.5 marks had some good and weak responses in responding to this question. In part (a), some candidates managed to identify the correct number of complete squares and failed to identify incomplete squares, therefore they failed to calculate the area covered by the Sisal Estate. Others were able to identify the correct number of complete squares and incomplete squares but failed to calculate areas by using the scale provided on the map. One candidate for example wrote correct complete squares which is 11 and incomplete squares as 34 instead of 36. This led him/her to get the wrong area of the Sisal Estate. This shows that some candidates had insufficient knowledge and skills on the mathematical operation of counting the number of squares in the given map.

In part (b), some of the candidates were able to identify the type of climate without explaining the reasons for their identification while, others did not mention the type of climate correctly but they tried to explain the reasons partially. One candidate for example wrote *Equatorial climate* instead of *Tropical climate* and gave the reasons as: *presence of forest, water bodies and agricultural activities such as sisal production*. This shows that the candidate was attracted by the presence of woodland, seasonal swamps and the sisal estate on the map provided.

In part (c), some of the candidates were able to find forward bearing of Mbwende grid reference 880395 to Tindiga school grid reference 910405 but failed to find back bearing while others failed to find both forward and back bearing. One candidate for example wrote the forward bearing as 20° instead of 71° or 72° and back bearing as 200° instead of 251° or 252° . This indicates that the candidate had limited skills of calculating bearing of objects or features by using a magnetic compass when identifying the position.

In part (d), some of the candidates managed to explain three factors which have influenced population distribution in the area. Some mentioned few factors while others mixed correct and incorrect responses. One candidate for example wrote *relief* which was a correct answer and incorrect answers were *types of drainage, scrubs and woodland*. Another candidate mixed correct and incorrect answers such as *unemployment, climate and soil*. This indicates that these candidates were not well informed on how to identify and interpret natural/ artificial feature on the map.

In part (e), some of the candidates managed to describe the drainage pattern shown on the map, some mentioned the type of drainage pattern without giving details while others mixed relevant and irrelevant answers like *dendritic, centripetal and radial drainage patterns* while the correct answers were dendritic and trellis drainage patterns.

In part (f), some candidates were able to identify direction on the map covered by highlands and gave unsatisfactory reasons while others failed to provide direction but presented the correct reasons. One candidate for instance wrote *Eastern side* and gave correct reasons as *it consists of contour lines which are close together compared to the other side of the map*.

The candidates who scored from 0 to 8.5 marks misconceived some parts of this question as they provided incorrect responses. In part (a), for example some candidates were able to identify the number of complete and incomplete squares but failed to calculate the area of the Sisal Estate. Some candidates managed to identify complete squares but failed to identify incomplete squares while, others were not able to identify complete and incomplete squares. One candidate for example wrote complete squares as *12* and incomplete squares *32* as a result he/she ended up calculating the wrong area. This candidate showed lack of identification skills of determining area on the map.

In part (b), most of the candidates in this category failed completely to suggest the type of climate of the area due to absence of degrees of latitudes on the map. Some mixed correct and incorrect type of climate. One candidate for example wrote *Equatorial climate* and gave reasons as; *latitude, type of crop and presence of water bodies*. The candidate showed lack of understanding of map interpretation skills.

In part (c), most of the candidates who performed poorly were not able to measure forward and back bearing of Mbwende grid reference 880395 to Tindiga school grid reference 910405. One candidate for example wrote

incorrect forward bearing as 134° and back bearing 44° . This showed that the candidate had insufficient skills of identifying grid references and identifying positions by using compass bearings.

In part (d), most of the candidates were not able to write correct factors which influence population distribution in the area, one candidate for example wrote *presence of dispensary, school and camp*. This candidate failed to interpret natural and artificial features affecting population distribution on the map.

In part (e), some candidates managed to describe drainage patterns shown in the map while, other candidates mentioned without providing evidence and others were not able to. One candidate for example wrote types of settlement such as *nuclear, linear and scattered pattern* instead of drainage patterns such as *dendritic, centripetal and radial*. The candidate was confused by the word pattern and that is why they mixed the two concepts settlement pattern and drainage pattern.

In part (f), some candidates failed to identify the direction of the area covered by highlands. Some identified correctly the direction but gave no evidence while other candidates provided irrelevant reasons. One candidate for example wrote *Northern part because the area has many contour lines compared to other parts*. Therefore, poor responses to some parts of these questions led the candidates to score low marks. Extract 1.2 represents a sample of a poor response.

d.	SOIN.	
a.	Area = Full square + Half square	
	$13 + 34 = 13 + 17$	
	Full square = 13	
	Half square = $33 \ 34 = 30 \text{ cm}^2$	
	Scale 1:50,000.	
	1 km = 100,000 cm. $1 \text{ km} = 100,000 \text{ cm}$	
	$50,000 = ?$ $? = 50,000$	
	50,000 = 100,000	
	100,000 100,000	
	1 km = $\frac{1}{2} \text{ cm}$.	
	? = 2 cm	
	$\frac{1}{2} \text{ cm} \times 2 \text{ cm}$.	
	1 km	
	Area = Side x Side.	
	Area = 1 km x 1 km	
	Area = 1 km ² .	
	Area = 30 cm ² x 1 km ² . ∴ Area is 30 km ² .	
b.	The climate of an area is equatorial climate due to presence of scattered vegetation on the map	
c.	SOIN	
	FB = BB ± 180°	
	FB = 158° ± 180° (180° - 152°)	
	FB = 22°	
	BB = FB ± 180°	
	BB = 62° ± 180°	
	BB = 180° - 62°	
	BB = 112°	

Extract 1.2: A sample of a part of a poor response to question 1

In extract 1.2 the candidate provided correct answers in part (d) and incorrect responses in other parts of question 1. He/She failed to count full and half squares which led to the wrong answer of area of the sisal estate. He/she also was not able to measure correctly the forward and back bearings.

2.1.2 Question 2: Field Research Strategies

The question had two parts (a) and (b). In part (a), the candidates were required to describe four types of sampling techniques. In part (b), the candidates were required to outline four importance of sampling. The total marks allocated for this question were 15.

This question was opted by 77 percent of the candidates whereby 9.3 percent scored from 9 to 15 marks, 25.2 percent scored from 5.5 to 8.5 marks and 65.5 percent scored from 0 to 5 marks. The general performance in this question was poor since 34.5 percent of the candidates who attempted it scored 9 marks and above. Figure 2 illustrates performance in this question.

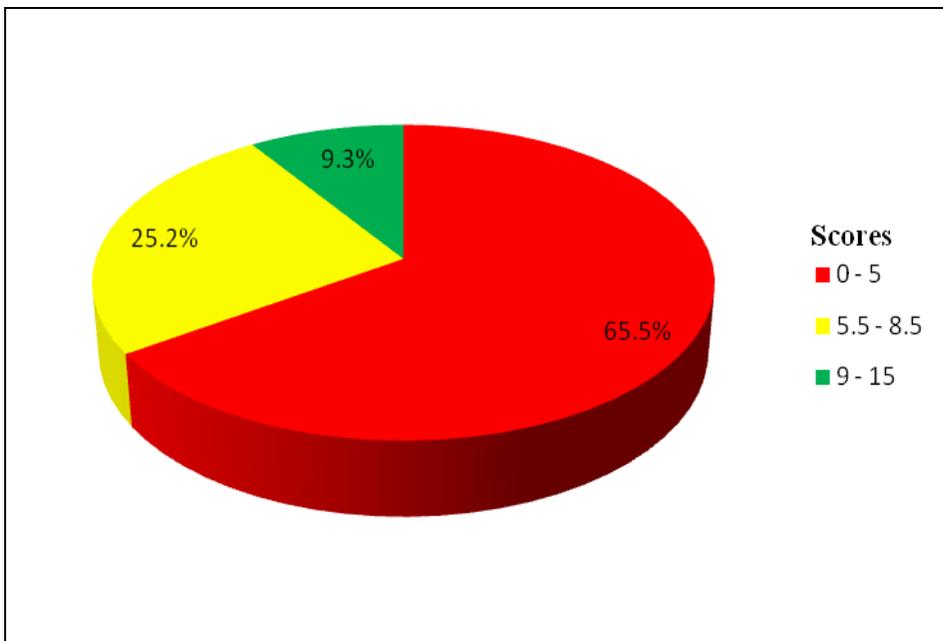


Figure 2: Candidates' Performance in Question 2

Most of the candidates who scored from 10 to 15 marks were able to answer the question correctly which reveals that these candidates were knowledgeable and skilful in research methods. In part (a), for example some candidates were able to describe the four types of sampling techniques such as; *simple random sampling*, *systematic sampling*, *strategies sampling* and *cluster sampling* providing correct description. Some managed to provide the correct types of sampling techniques but with unsatisfactory explanations while others provided few types of sampling techniques.

In part (b), they succeeded to outline four importance of sampling such as; *it saves time as few respondents are used, it is less expensive than a census which covers a large population, it avoids repetition, sampling remains the only choice when a test involves the destruction of the item under study.* Some of the candidates identified three instead of four importance of sampling while others managed to identify four importance of sampling but provided incorrect explanations. Therefore their scores varied due to strengths and weaknesses of their responses. Extract 2.1 is a sample of a good response.

02.	(a)	
	<p>Sampling is the process of selecting the sample (representative) from the large group of population - who will be used by researcher to provide the data during research. The sample can be item, or - person. The selected sample must have the high level of representativeness, the sample must be large enough in order to be used as the representative to the whole population. There are different types of sampling these are these types; -</p> <p>Random sampling; This is the type of sampling by which the researcher selects the sample randomly from the population. Each individual in - this kind of sampling has equal chance to be selected into sample. The researcher selects any body to be the sample. Example, the teacher can choose any student in the class room and make him/her a sample without any character.</p> <p>Systematic sampling; This is the kind of sampling by which the sample obtained systematically by the researcher. There are not any individual have equal chance to be selected but the - researcher selects the sample by considering - the certain factors. Example, the researcher can - select the sample by looking the level of education.</p> <p>Stratified sampling; This is the type of the - sampling technique by which the researcher choose the sample from different strata. Example the, researcher can select sample from different - secondary schools in Tanzania. The factors where the sample obtained may be schools, or other organizations.</p>	

2	<p>quota sampling; This is the sampling technique where by the researcher selects the sample from different quotas, or stratas. This can be done systematically where the researcher have been prepared his/her factors to consider when selecting the sample, example level of education and others.</p> <p>There fore there are different sampling technique as explained above. These all techniques helps the researcher to get good are required sample which will be used to collect data during research.</p>	
	<p>(b) Sampling have many advantages, The following are advantages of sampling;</p> <p>(i) Sampling serves resources; By using the sample, resources such as, time, and money will be served because, only sm sample can be used to represent the whole population,</p> <p>(ii) Sampling helps to get accurate data; By using sample, the researcher can obtain the accurate data from the large population, This is because, the only sample can provide good information compared to the large population.</p> <p>(iii) Sampling serves time; By using sample to represent the whole population, the time is served since the researcher tend to deal with the sample and not whole population,</p> <p>(iv) Sampling reduces biasness; By using the sample the researcher can avoid biasness when conducting the research. This is because only the sample can able to provide good information compared to the large group of people.</p>	

Extract 2.1: A sample of a correct answer to question 2

The candidates who scored from 6 to 9 marks were not able to attempt the question correctly as they provided incorrect responses. In part (a), some of

these candidates were able to define sampling technique and explain four types of sampling techniques unsatisfactorily while, others explained few types of sampling techniques. One candidate for example mixed correct and incorrect types of sampling techniques such as *simple random, systematic and applied sampling*.

In part (b), some of these candidates were able to mention few importance of sampling while others mixed correct and incorrect answers. One candidate for example wrote; *it helps to get information, some samplings are cheap, does not need high skills in collecting information and it saves time*. Therefore, this shows that this candidate had inadequate knowledge and skills on Field Research Strategies particularly on the types of sampling techniques. Hence, candidates' marks varied according to variations in their responses.

The candidates who scored from 0 to 5 marks attempted some parts of the question incorrectly as they had little knowledge or none at all in this topic. Most of these candidates failed in part (a), that required the candidates to define sampling but mentioned few types of sampling techniques. In part (b), some of them managed to outline few importance of sampling while others failed to respond to any part. One candidate for instance failed to interpret the importance of sampling and gave responses such as; *sampling gives an experience to a researcher about a particular problem, sampling enabling accurate formulation of policy*. Another candidate mentioned the methods of collecting data instead of types of sampling such as; *interview technique, questionnaire technique, observation technique and focal group discussion*. This candidate lacked knowledge and skills on the research technical terms.

2(a)	<p>Four types of sampling techniques</p> <p>Sampling techniques refers to the different techniques used in selecting and collecting data basing on a certain problem. The following are types of sampling techniques</p> <p>Interview; This is the method of sampling in which interviewer collect information face to face or through telephone. There are two types which is structured interview and unstructured interview. It is used to both literacy and illiteracy. It is cheap but also it consume time.</p> <p>Questionnaire; The sampling technique in which respondent are asked question and answer. There are of two types open-ended questionnaire in which a respondent have a chance of explaining on what he/she knows about the problem and closed questionnaire respondents are limited on answer by just saying yes or NO. This method use by only who know how to read and write.</p> <p>Observation; Is the sampling technique in which a researcher observe behaviour, activities done by a group or society needs to conduct a research. There are two types which are participant observation in which a researcher become a part of the and parcel of the researched group and non-participant in which a researcher just observe and collect information by using few people. There is insecurity of researcher, people tend to change their behaviour when know that are studied.</p>
------	--

Extract 2.2: A sample of a part of an incorrect response to question 2

In extract 2.2 a candidate wrote in part (a) data collection tools such as questionnaire, interview, focus group discussions and observation instead of sampling techniques; in part (b) the candidate wrote the importance of research.

2.1.3 Question 3: Simple Survey and Map Making

The question required the candidates to clearly show the equipment used in plane table survey and explain the procedures of conducting plane table survey successfully. The total marks allocated to this question were 15.

This question was attempted by only 20 percent of all the candidates who registered for this subject. Most of the candidates did not attempt the question. The general performance in this question was poor as it was only 19.7 percent of the candidates who attempted the question scored 5.5 marks and above. Further analysis of the data shows that very few candidates 1.4 percent scored from 9 to 15 marks, 18.3 percent scored from 5.5 to 8.5 marks, and the majority, that is 80.3 percent scored from 0 to 5 marks.

The candidates who scored from 10 to 15 marks managed to answer the question according to its demand. The responses provided by these candidates showed that they were competent on survey and map making especially on the procedures for carrying out Plane Table Survey. They were able to show the equipments used in Plane Table Survey such as; *the Plane Table, Alidade, the Plumb bob, The Trough Compass, Spirit Level, Tripod Stand, Chain/Tape, Plain Paper, Notebook and Pencil*. Most of these candidates supported their answers with correct diagrams.

Moreover, most of the candidates in this category provided correct procedures of conducting Plane Table Survey such as;

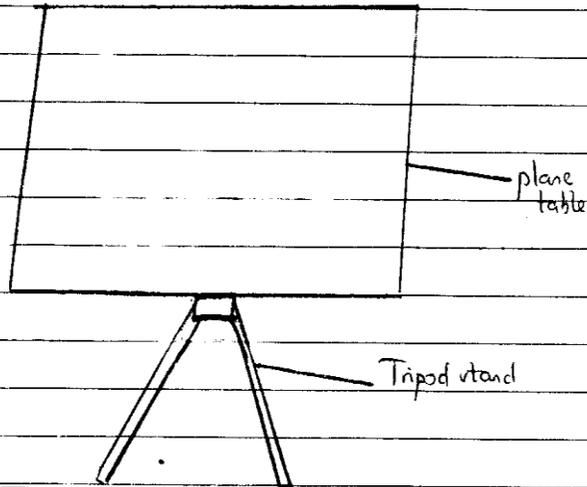
Set up the table at A and mark position A on the paper so that other stations can be fitted into the paper, mark in Magnetic North with the Trough Compass, Sight along line A to Ranging pole at B and draw a pencil line, measure the length of A and B and mark a point on the pencil line B to scale, set up the Plane table at B, sight along B – C and draw the corresponding line on the paper, measure length to C and mark C on the BC line to scale and repeat the process until the traverse is complete.

Their marks varied depending on the quality of their responses. Extract 3.1 represents a sample of a correct response.

Q 3. plane table survey, is the kind of survey that is used to measure the right angle and also the distance measurement since it contains the instrument like the chain or tape that work effectively on the measurement of the short distance and also long distance. Also plane table survey it helps most on the ensure that measurements are taken clearly and with accuracy.

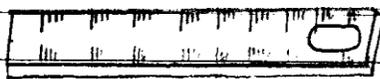
The following are the equipments used in plane table survey which are:

Plane table, involves the flat table made up of wood or metal that helps on placing of instruments on it when taking the measurement on the plane table survey for the accurate results to the surveyors.



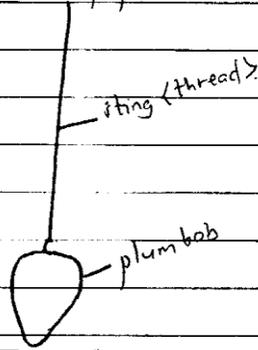
Tripod stand, is among the metal instrument that helps on holding the plane table during measurement of angles and all accurate distance measurements. It tends to support the plane table on its position.

Spirit level, is the rod that has a flat surface that contains the liquid on it that helps on accurate measures of the right angle on the plane table. Hence it is an important tool.

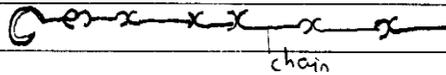


3.

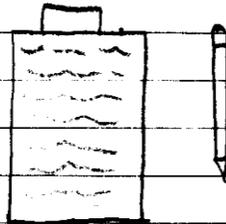
Plumb bob is the Instrument that composed the Metal coil that hold with the thread or string that Help on determine the position of the object angles. Hence it Help most on the well Accurately conduction of plane table survey.



Chain or Tape, Also it involve the Instrument like the chain that Help on determine the distance Measurement on the plane table survey and Hence it can be used as the Accurately measurement on it to the surveyors.



NoteBook and pencils, Also for the record of the Measurement done we Use the accurately Notebook and the pencils to keep the data for future Uses. And Also it's taken at the end of survey.



Generally, the plane table survey survey is useful to the surveyor since it determine the Accurately Measurement well to the ground And Also it Help on Identification of the geographical areas and feature clearly.

Qn 3.	PROCEDURES USED IN CONDUCT PLANE TABLE SURVEY.	
i)	Place the plane table and Tripod stand to the place where Measurement are to be taken	
ii)	Use the plumb bob to place at the site where the Measurement are to be taken regarding the position of the right side of the Object	
iii)	Use the chain or tape to measure the distance that can't be taken by the plumb bob Instrument and Also the other Instrument like spirit level.	
iv)	Call the reading points to the Booker accurately and Also Use the Accurately pronounced of the readings.	
v)	Use the spirit level to measure the Angles on the table and Also record Accurately angles Measured, by spirit level that tried to Balance the table when take Measurement	
vi)	Record the data of the points call by the surveyor on the Notebook and Also the Use of pencil when recording the Measurements	

Extract 3.1: A sample of a correct answer to question 3

The candidates who scored from 5.5 to 8.5 marks partially addressed the demand of the question. Some candidates were able to name and draw the equipment used in plane table survey but they were not able to explain them well. Others managed to show the relevant equipment used in Plane Table Survey but they were not able to show the correct procedures used in plane table survey. One candidate for example managed to name, draw and explain equipment used in conducting a plane table survey as *chain*, *tripod stand*, *the plane table*, *alidade* and *plumb bob* but failed to explain the procedures to be

followed in conducting a plane table survey which indicates partial knowledge and skills in the procedures of conducting Plane Table Survey. Therefore, the variation in their scores was caused by strengths and weaknesses of their answers.

The candidates who scored from 0 to 5 marks provided incorrect responses. Some candidates for example failed to define Plane Table Survey but were able to mention few equipment used in the Plane Table Survey. They were also not able to show the correct procedures to be followed in conducting Plane Table Survey. Some candidates finished by mentioning equipments used in Plane table Survey partially without explaining their procedures. One candidate for example mixed correct and incorrect equipment such as *plane table, alidade, compass and pegs*. The candidate mentioned *reconnaissance, hypothesis, experiment and recording* as procedures. Another candidate mentioned correct equipment such as *plane table, chain, tripod stand and writing material such as note book, pencil and paper*, but also wrote; *it provide data , provides alternative solution, tests hypothesis and used in data analysis* as procedures of conducting plane table survey. Extract 3.2 is a sample of a poor response.

i) Reconnaissance	
making survey in the field area before the survey to take place	
ii) making budget	
The budget of the certain field should be budgeting before the survey in the field research of the plane table	
iii) Preparation of equipment	
The equipment which are used in the plane table must be prepared Example plane Table, and the notebook in order to have successful field work	
iv) working in the field area:	
The working in the field area also leading the field work to be successful in order to obtain the data.	
v) Data collection	
The collection of the data in the field work after the measurement of the area in the field through the plane table survey in the field.	
vi) Data analysis	
The data analysis also take place in the plane table after the collection of the data in the field	
vii) Data presentation	
The presentation of the data in the field is the last stage of the plane table work	

Extract 3.2 A sample of an incorrect response to question 3

In extract 3.2 a candidate mixed the procedures of conducting chain survey such as reconnaissance and preparing equipments with the stages of conducting research such as data collection, data analysis and data presentation instead of the procedures of conducting plane table survey.

SECTION B: PHYSICAL GEOGRAPHY

2.1.4 Question 4: Space Dynamics

This question instructed the candidates in eight points to explain how climate determine human settlements and economic activities with a support of examples. The total marks allocated for this question were 20.

The question was attempted by 47.8 percent of all the candidates, of whom 23.5 percent scored from 12 to 20 marks, 42.6 percent scored from 7 to 11.5 marks and 33.9 percent scored from 0 to 6.5 marks. The general performance in this question was good since 66.1 percent of the candidates who attempted this question scored 7 marks and above. Figure 3 illustrates the performance in this question.

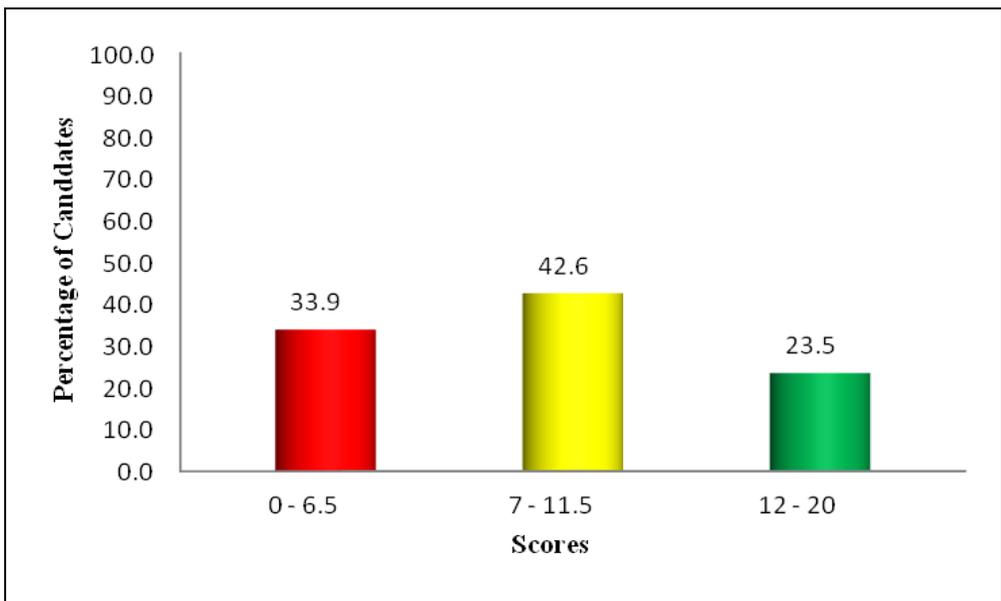


Figure 3: *Candidates' Performance in Question 4*

The candidates who scored from 12 to 20 marks had adequate knowledge on the subject matter asked. In their responses they managed to explain how climate determines human settlement in the following ways;

Climate determines the type of settlement pattern to be either nucleated or scattered since people tend to settle in areas with good climatic conditions such as enough rainfall, warm or cool conditions; climate influences the style of buildings for example in areas with heavy rainfall, the roof of the houses will be sloppy and in arid areas roofs of the houses can be smooth since there is no problem of

leaking of roofs due to scanty rains; climate can determine prevalence of diseases because areas with high cases of diseases like Malaria and Cholera will discourage settlement as people prefer to settle in areas with absence of diseases; climate determines the development of soil because areas with fertile soil encourage more people to settle to carry out different economic activities and finally, climate determines environmental disasters like floods, erosion which causes disturbances to people hence people avoid settling in them areas which are prone to disasters.

The candidates in this category managed also to explain how climate determines human activities in the following ways;

Climate influences agricultural activities especially in areas with enough rainfall and allow growth of crops which need enough rainfall; climate determines industrial location because the areas with heavy rainfall discourage transport and communication hence discourage industrial development; climate influences transportation systems both positively and negatively because areas which have low rainfall, road transport is efficient while water transport tends to be poor; climate influences tourism activities and fishing activities.

Variation of their marks was influenced by the strengths and weaknesses of arguments provided by individual candidates.

The candidates who scored from 7 to 11.5 marks did not have enough knowledge and skills on how climate influences human settlement and economic activities. Some of the candidates in this category provided a relevant introduction but gave unsatisfactory explanations on how climate determines human settlement and economic activities. Some provided a relevant introduction but failed to give detailed explanation, some mixed correct and incorrect explanations on how climate determines human settlement and economic activities while, others provided an irrelevant introduction and wrote correct points with incorrect explanations. One candidate for example, included the types of climate such as *savannah, warm, polar, marine, equatorial, tropical, arid* and *Mediterranean climate* in the explanations instead of explaining the influence of climate to human settlements and economic activities. Therefore, strengths and weaknesses of their explanations led to variation in their scores.

Similarly, the candidates who scored from 0 to 6.5 marks had little or no knowledge on the influence of climate to human settlements and economic activities. Some of the candidates in this category were able to provide the correct influence of climate on economic activities but were not able to

explain how climate influences settlements. Some of them gave insufficient explanations on the influence of climate on both settlement and economic activities while, others were not able to explain the influence of climate on both human settlements and economic activities. One candidate for example provided a relevant introduction, included elements and factors affecting climate such as *precipitation, temperature, wind, humidity, relief, biological, soil* and *cultural factors* in explanations instead of explaining the influence of climate.

Another candidate wrote factors influencing weather and climate such as *relief of the area, distance of the earth, latitude position, altitude, ocean currents, atmosphere absorption* and *prevailing winds* instead of explaining the influence of climate. Extract 4.1 represents a poor performance in question 4.

Qn4	Climate is the weather condition which recorded	
	over a short period of the time. climate can be affected	
	by humidity, temperature, altitude, cloud cover, and	
	latitude. climate can determine human settlements	
	and economic activities due to the following factors.	
	Albedo, this is the specific heat of the surface. It can	
	determine human settlement and economic activities	
	because people will stay safe in the area where there	
	is normal heat.	
	Length of the day and night also it help to deter	
	mine settlement and human activities since during	
	day time people can control their business and at	
	night they are going to sleep. waiting for another	
	day help people to know what time and where they	
	are suppose to be.	
	Distance of the earth from the sun, Also this	
	help to know season of the year because when people	
	are trying to do their business they should look where	
	they are suppose to be and what they are doing	
	Distance of the earth from the sun has cause	
	the occurrence of day and night where by during	
	day people are working and night people can not	
	working since the time will be overy instead of	
	working they are going to sleep so due to	
	day and night and distance of the earth from	
	the sun people can determine the activities.	

Qn 4	<p>Precipitation; Precipitation help in different activities such as cultivating, irrigation and settlement precipitation help in plant growth which help people to get different products like crops. also help to get water which is essential for building process. Through precipitation we get water.</p> <p>Solar output; This is the increase in solar energy within the earth's surface, enable to determine settlement and economic activities because it will help people to have different settlement. due to different seasons.</p> <p>Altitude; Increase in altitude led to increase in temperature due to this situation climate can determine economic activities since the determination will become very easy.</p> <p>Humidity; This also will help in determination of the climate because climate depend humidity in its occurrence so due to humidity the climate will be easy to determine economic activities.</p> <p>Aspect; Aspect lead to the formation of different land features also this help in determination of and economic activities.</p> <p>Generally climate is mostly importance since it provide fresh air source of water due to precipitation due to this climate has great importance to our environment.</p>
------	--

Extract 4.1: A sample of an incorrect response to question 4

In extract 4.1 the candidate explained the factors which influence climate instead of explaining how climate influences human settlements and economic activities.

2.1.5 Question 5: Position, Behaviour and Structure of the Earth

The question required the candidates to justify the statement that, the earth is said to be spherical in nature by using six points. The total marks allocated for this question were 20.

The questions was attempted by 97.4 percent of all the candidates, of whom 68.4 percent scored from 12 to 20 marks, 27.9 percent scored from 7 to 11.5 marks and only few candidates (3.7%) scored from 0 to 6.5 marks. The general performance in this question was good since 96.3 percent of the candidates scored 7 marks and above. Figure 4 illustrates the performance in this question.

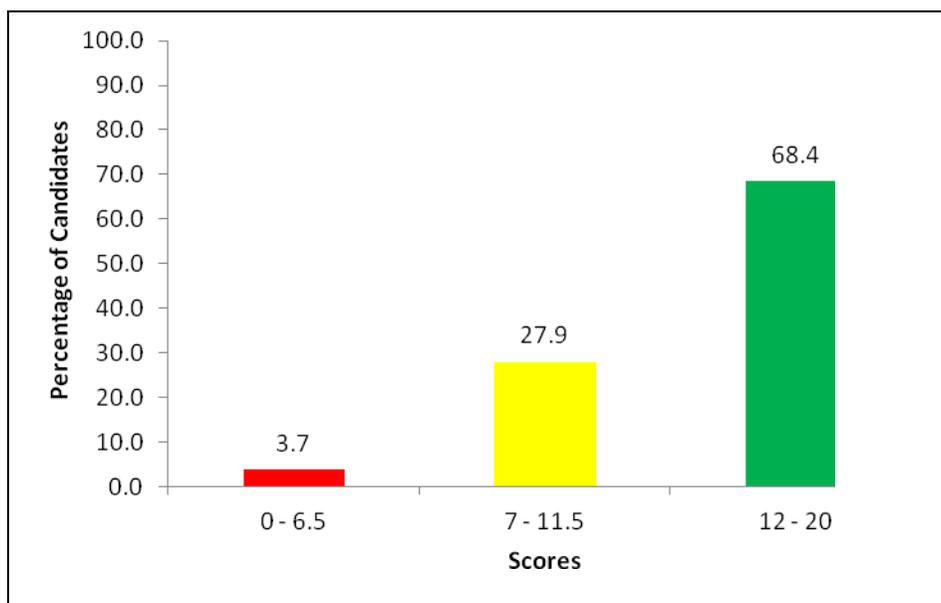


Figure 4: Candidates' Performance in Question 5

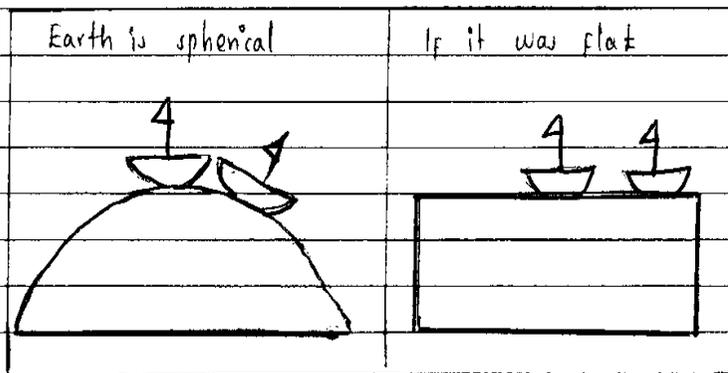
The candidates who scored from 12 to 20 marks had adequate knowledge on the topic of Position, Behaviour and Structure of the Earth specifically on the shape of the earth. Some of the candidates in this category gave a relevant introduction on the shape of the earth and they provided six evidences to prove that the earth is spherical in shape such as; *aerial photograph, the lunar eclipse (moon eclipse), circumnavigation of the earth, sunrise and sunset, the earth's curved horizon and ship visibility*. They supported their answers with correct diagrams.

Some of the candidates managed to provide correct evidences which prove that the earth is spherical in shape but failed to use diagrams in some points. Other candidates provided the evidences to prove the sphericity of the earth but gave unsatisfactory explanations in some points while, others explained few evidences contrary to the demand of the question. Extract 5.1 is a sample of a correct response.

05.

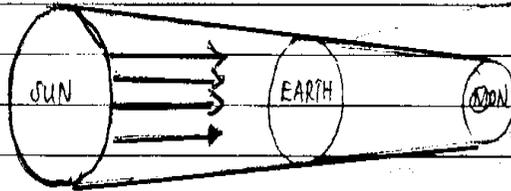
Earth is a planet which is the third from the sun and it's the one which supports life, human being and animals. Earth has some of the characteristics such as; it is dynamic, it rotates on its own axis, it revolves the sun, it fits on its own axis, it has both internal and external layers. The earth is believed to be spherical in shape, the following are the reasons for the spherical of the earth:-

Ship Visibility. When viewing two ships coming to the shore at the straight line, one ship is going to be seen first then followed by the other one. And also, when viewing a ship coming to the sea shore the smoke is seen first, then the chimney and lastly the whole ship. If the earth was flat the ship could be seen all of it at once, but due to the spherical shape of the earth it is not seen all of it at once.

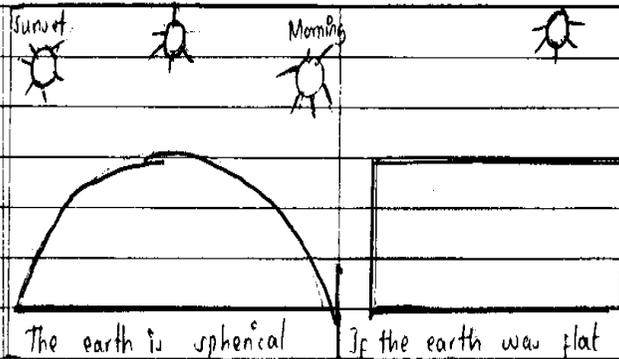


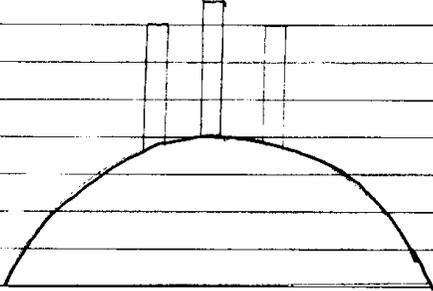
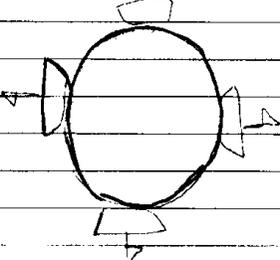
Lunar eclipse, this is whereby the earth is between the sun and the moon. That makes the light from the sun hit the earth and

OS. the shadow cast on the moon. the shadow does not look flat or even round in shape, but it appears spherical in shape. This shows that the earth is spherical



Sunrise and sunset. The sun is static, but the earth rotates on its own axis causing the occurrence of day and night. The sunrise from the east and sets on the west. So, if the earth was flat the sun would have rise all the parts of the earth at once, and set at once, but due to the spherical shape of the earth the people on the Eastern side see the sun earlier than the people at the western side of the earth.



05.	<p>The Ranging poles: If the range poles are arranged on a straight line and with the same height. The range pole at the central part will appear to be taller than the others, this shows that the earth is spherical. But if it could have been flat all the range poles could have appeared to be straight and with the same height.</p>	
		
<p>Circumnavigation of the Earth When a person decides to move from one point of the earth and goes straight, at the end the person will return to the starting point where he started. This is because the earth is spherical, but if it could be flat, one could never come back to the starting point.</p>		
		

Extract 5.1: A sample of a correct response to question 5

The candidates who scored from 7 to 11.5 marks did not have adequate knowledge and skills on the shape of the planet earth particularly on the characteristics of the earth's crust. Most of these candidates for instance managed to provide relevant introduction about the planet Earth but provided unsatisfactory evidences that prove the sphericity of the earth with well labelled diagrams.

Furthermore, some candidates inadequately explained the evidences that prove the spherical shape of the earth while, other candidates mixed correct and incorrect explanations without drawing diagrams. Some failed to provide a

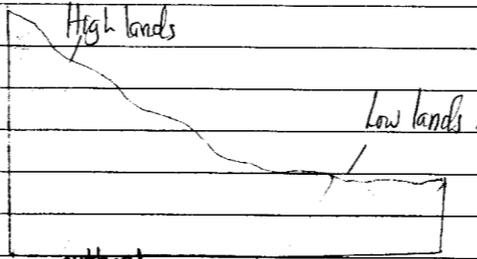
relevant introduction and mentioned a few evidences with adequate explanations and did not use diagrams. The strengths and weaknesses of their responses led to the variations of their marks.

The candidates who scored from 0 to 6.5 marks had little or no knowledge and skills on the concept of the shape of the Earth. Some candidates in this category were able to provide a relevant introduction about the shape of the earth but were not able to explain correctly the evidences that prove the earth is spherical in shape. They also provided an irrelevant conclusion.

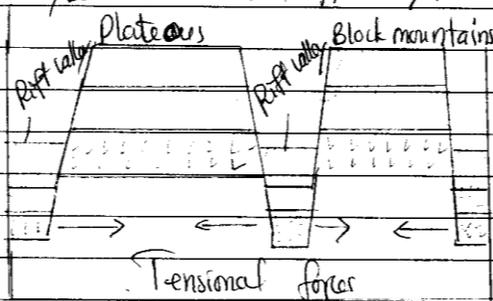
Some of the candidates were able to give a correct introduction with a few evidences to show the shape of the earth but gave unsatisfactory explanations. Others were not able to provide a correct introduction and correct evidence that prove that the earth is spherical in shape. One candidate for example, wrote incorrect evidences such as; *polar diameter, polar circumference, gravitational pull at the pole region and difference in latitude*. Another candidate defined the nature of the earth in terms of how the earth is appearing and everything in the earth. This candidate mentioned; *linear eclipse, day and night, occurrence of photograph, Bedford experiment, spherical horizon and ship visibility*. The variation in their marks was a result of the varied weaknesses in their responses. Extract 5.2 is a sample of an incorrect response.

5.	Earth is the 3 rd planet from the
	Sun. Earth is among of the planet wh in
	the solar system which support lives of living
	Organisms. It is true that "The Earth is -
	said to be spherical in (shape) nature". This is
	due to the following reasons,
	The presence of landscapes; The
	presence of low land and high land, this -
	is an indicator that the Earth is
	spherical in nature. The diagram below -

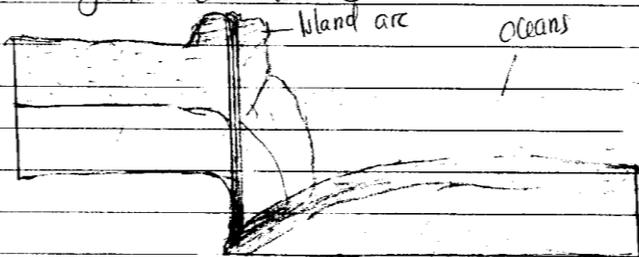
5 is explained.



The ~~presence~~ ^{outbreak} of landslides; the movement of the earth crust leading to the outbreak of the land forms such as block mountains, rift valleys, this indicates that the earth is spherical in nature and try to make its balance, The diagram below shown. which resulted to the formation of plains, block mountains and rift valley.



The outbreak of volcanic eruptions; which resulted to the formations of island arcs along the shore or inside the shore. The diagram below is shown.



Extract 5.2: A sample of an incorrect response to question 5

In extract 5.2 the candidate explained different land forms found on the earth's surface such as high land, lowland, mountains, rift valleys, plateaus and islands as evidences for sphericity of the earth.

2.1.6 Question 6: Water Masses

The question required the candidates to classify six types of lakes according to their mode of formation using relevant examples. The total marks allocated for this question were 20.

This question was attempted by a large number of students; 81.3 percent of all the candidates who were registered for this subject. The general performance in this question was good as 95.8 percent of the candidates who attempted it scored 7 marks and above. Further analysis shows that, 54.8 percent of the candidates scored from 12 to 20 marks, 41 percent scored from 7 to 11.5 marks and only 4.2 percent scored from 0 to 6.5 marks. Figure 5 illustrates the performance in this question.

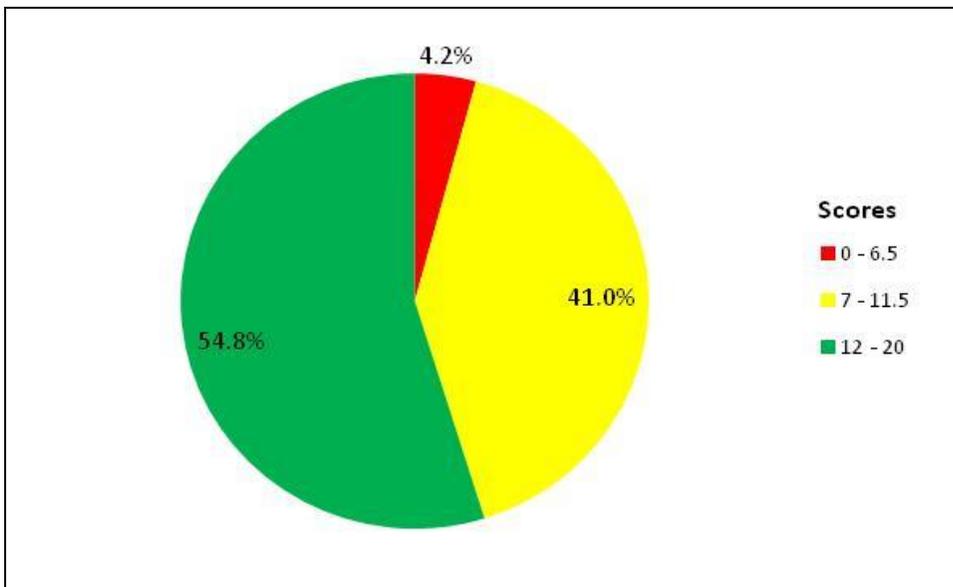
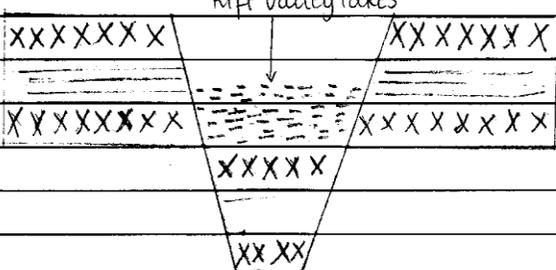


Figure 5: *Candidates' Performance in Question 6*

The candidates who scored from 12 to 20 marks had a good knowledge and skills on classification of lakes according to their mode of formation. One candidate for example identified six types of lakes according to their mode of formation as;

Lakes formed due to earth movements (Rift valley lakes, Down warping lakes); lakes formed due to volcanic activities, (Crater and Caldera lakes like the Caldera e.g. Shala in Ethiopia); lakes formed due to erosion like the Glacial lakes i.e. Tana lake in Kenya, Rock basin lake; trough lakes formed due to deposition like the Kettle lakes, Moraines lakes, the Flood plain lakes; Man-made lakes; Solution lakes and the Vegetation dammed lakes.

They were also able to provide a relevant introduction and conclusion. Some of the candidates in this category provided an irrelevant introduction, explained correctly the types of lakes formed but did not provide a relevant conclusion. Others classified few types of lakes with satisfactory explanation. Variation of their marks was due to strengths and weaknesses in their responses. Extract 6.1 is a sample of correct response.

6	<p>A lake is a depression on the earth's surface in which water accumulates. A lake may be large or small depending on the area of coverage. Lakes form important physical features on earth's surface because they help in different activities like fishing, transportation, tourism and domestic activities. Examples of lakes are like Lake Victoria and Lake Tanganyika. The classification of lakes according to mode of formation includes;</p> <p>Lakes formed due to diastrophic (earth's) movement; These are lakes formed due to the endogenic and exogenic movements of the earth. They may include;</p> <p>Rift valley lakes; These are lakes that are formed due to faulting causing water accumulation in the rift valleys. The lakes formed are very deep since they tend to cross the rift valleys. The examples include; Lake Tanganyika and Nyasa in Tanzania and lake Turkana in Kenya</p>	
	<p style="text-align: center;">Rift valley lakes</p> 	
	<p>Downwarped lakes; They are lakes formed when water accumulate on the downwarped basins on the earth's surface. Downwarped lakes are not very deep but they tend to cover a very large area and occur as large lakes. Example is a lake Victoria which is formed due to downwarping of the earth's surface and it is the biggest lake among African lakes</p>	

6

Basin or downwarped lake

Lakes due to volcanic activity; These are the lakes that are formed after occurrence of volcanic activities. After water accumulates on the remnants of volcanism, they include;

Crater and caldera lakes; Crater lakes are the lakes formed when water occupies craters and caldera lakes are formed when water accumulate in calderas. They are usually large. Example of a well known caldera lake is Lake Shala in Ethiopia.

crater lake

Lava-dammed lakes; Is a lake that is formed when highly viscous lava which has erupted flows into the river channels. And when it cools and solidifies, it causes the blocked part of the river to remain as a lake. Example is the Sea of Galilee in the Jordan valley.

Volcanic eruption

Mass of igneous lava

River channel

Extract 6.1: A sample of the correct response to question 6

Most of the candidates who scored from 7 to 11.5 marks had inadequate knowledge on inland drainage thus they provided an unsatisfactory introduction on lakes and mentioned the types of lakes with inadequate explanation. Most of the candidates in this category provided correct types of lakes without giving a detailed explanation while, others provided few types of lakes but mixed up correct and incorrect explanations. One candidate for example mixed the correct and incorrect types of lakes as *oxbow lake*, *glacial lake*, *estuarine lake*, *fluvial lake*, *volcanic lake* and *Depression Lake*. This implies that the candidate had general knowledge on the topic of water masses specifically on types of lakes according to their mode of formation.

The candidates who scored from 0 to 6.5 marks were able to provide a relevant introduction of lakes but did not manage to explain any type of lakes according to their mode of formation. Some of them gave an irrelevant introduction, explained only few types of lakes with insufficient explanations and without examples. Others gave an irrelevant introduction of lakes, and mentioned types of lakes according to their mode of formation without elaborations. Variation of their scores depended on the strengths and weaknesses of their responses. Extract 6.2 is a sample of poor responses.

6	Lake, Is a large hollow of body which has got	
	high volume of water connecting to a sea or ocean.	
	The following are types of lake:	
	Perennial lakes, This are lakes which have two	
	seasons of high volume of water. For example the	
	River Uwala.	
	Intermittent lakes, This are lakes which have	
	got no reduction in the volume of its waters the	
	keep up the same volume throughout the year. Example	
	lake Victoria.	
	Ephemeral lakes, Are the lakes which	
	have only one season of high volume in the	
	water. For example lake Tanganyika.	

Extract 6.2: A sample of an incorrect response to question 6

In extract 6.2 the candidate associated the concept of types of rivers such as ephemeral, intermittent and perennial with types of lakes according to their mode of formation.

2.1.7 Question 7: Study of Soils

The question instructed the candidates to explain how parent rocks, climate and living organisms influence soil formation by giving three points for each. The total marks allocated for this question were 20.

This question was attempted by 72.7 percent of all the candidates who registered for this subject. The general performance in this question was good as 84.8 percent of the candidates who attempted it scored 7 marks and above.

Further data analysis shows that, 40.1 percent of the candidates scored from 12 to 20 marks, 44.7 percent scored from 7 to 11.5 marks and 15.2 percent scored from 0 to 6.5 marks. Figure 6 illustrates the performance in this question.

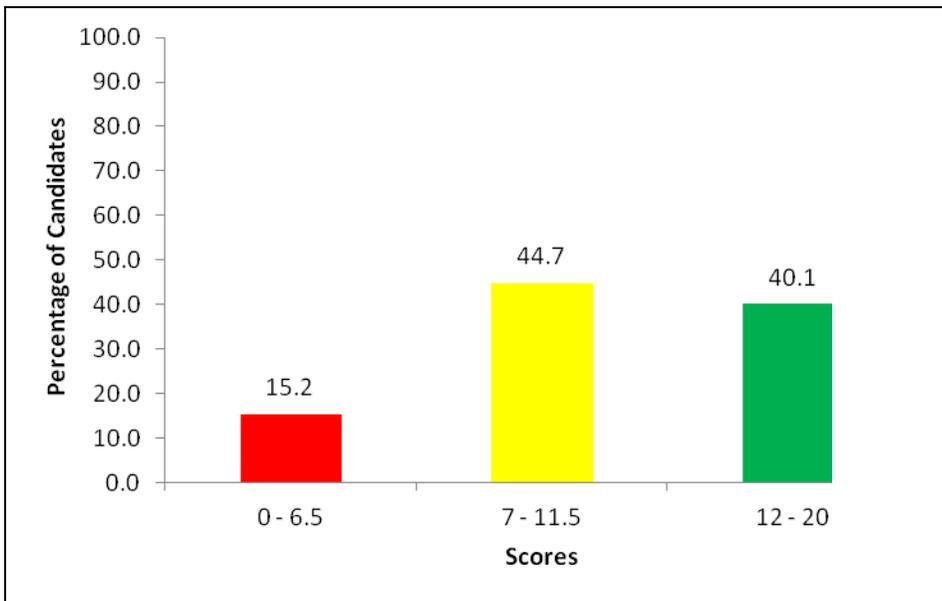


Figure 6: *Candidates' Performance in Question 7*

The candidates who scored from 12 to 20 marks were able to explain how the parent rock, climate and living organisms influences soil formation by giving three points for each. One candidate for example, defined soil formation as; *the development of soil from the parent rock materials under the interaction of other several factors which include climate, living organisms, topography and time*. The candidate explained the influence of the parent rock, climate and living organisms in soil formation as follows:

The influences of parent rock materials on soil formation are;

Parent rock materials are the rocks from which soil has developed and it is the source of inorganic materials of the soil component, parent rocks determine the rate of weathering in the process of soil formation and parent rocks determine the texture of the resultant soils.

The influences of climate on soil formation are as follows;

Rainfall provides moisture required for chemical weathering which leads to soil formation, rainfall affects the rate at which some soil forming process such as leaching can occur, high temperature

increases the rate of weathering i.e. exfoliation and climate influence the process and rate of erosion by water.

The influences of living organisms on soil formation are like:

Living organisms assist in breaking down of rocks through furrowing, ploughing and plant root penetration, they influence the chemical composition of soil by adding or removing organic acid which facilitate soil formation, plants and animals matter decay influence development of soil profile by the amount of humus or minerals which improve soil fertility and human beings influence rocks disintegration through physical processes.

Some of the candidates were able to give a relevant introduction, explained how parent rocks, climate and living organisms influences soil formation but did not provide a conclusion, and some of them mixed correct and incorrect points with a correct conclusion. Extract 7.1 is a sample of a correct response.

7. Soil refers to the uppermost layer of the earth's surface consist of minerals, nutrients, water as well as air and microorganisms. For soil to be formed there should be interaction between various factors including climate, parent rocks, relief as well as time. On the other hand parent rock, climate and living organisms influence soil formation in a number of ways. These includes the following -

Parent rock undergo weathering to produce smaller fragments which compact to form soil, the parent rocks tend to undergo weathering process which is mainly influenced by temperature and rainfall causing them to break down into smaller fragments which on compaction forms the soil in presence of other influencing factors for soil formation. The parent rock can undergo either physical or mechanical and chemical weathering.

Parent rock determine the mineralogical composition of the soil, the parent rocks are also responsible to determine the type of minerals present in the soil since the parent rock tend to differ in terms of mineral composition. Example the soil whose parent rocks contained iron will also compose iron minerals.

Parent rock determines the soil colour, the soil colour is also influenced by the parent rock despite presence of other factors like organic matter. If the parent rock is black coloured the soil is also likely to be black coloured. Hence the parent rock plays a significant role in determining the colour of the soil. Despite the parent rock climate also plays a great role in influencing soil formation through its agent of temperature and rainfall either directly or indirectly.

7.	as explained below:	
	<p>Rainfall provides moisture to the soil which enhances decomposition of organic matter for the soil to be formed there should be decomposition of organic matter so as to add humus to the soil. Hence rainfall as a climatic component add moisture to the soil which inturn enhances decomposition process to take place for the soil to be formed.</p>	
	<p>Temperature influence the process of weathering and decomposition of organic matter. Temperature play a great role in process of weathering of the rock so as to form the soil, also temperature play part in increasing the rate of decomposition of organic matter. All together weathering process and decomposition of organic matter influence soil formation.</p>	
	<p>Climate enhances and determine the vegetation growth, vegetation influence soil formation as the leaves of plants undergo decomposition to increase humus and organic matter content into the soil which inturn influence soil formation. Also vegetation play part in weathering process as one among the soil forming process.</p>	
	<p>Despite the role of climate, living organisms also influence soil formation as explained below:</p>	
	<p>Died plants and animals undergo decomposition hence addition of humus to the soil. After the plants and animals have died they tend to undergo decomposition and through this process there occur addition of humus to the soil which inturn enhance soil formation.</p>	
	<p>Soil microorganism are responsible for decomposition process in the soil.</p>	

Extract 7.1: A sample of a correct response to question 7

The candidates who scored from 7 to 11.5 marks showed inadequate understanding on the topic of Study of Soils especially on the concept of soil formation. The candidates in this category scored these marks because they were able to give a relevant introduction about soil formation, but they explained unsatisfactorily how parent rock materials, climate and living organisms influence soil formation. Some of the candidates mixed correct and incorrect factors influencing soil formation. One candidate for example wrote about parent rock that; *high temperature influences the rate of weathering in igneous rocks, permeable rock and impermeable rock*. On climate these candidate mentioned the types of climate such as *equatorial climate, desert and tropical climate* and on living organism he/she wrote *rich in humus, absence of organisms and influences the rate of rock disintegration*.

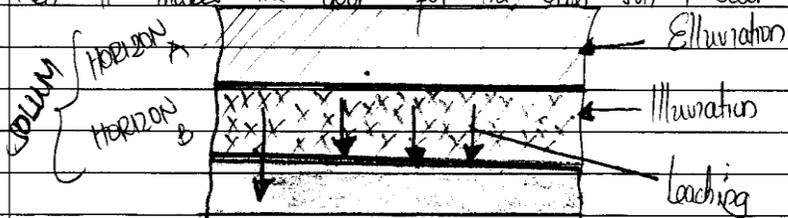
Moreover, the candidates who scored from 0 to 6.5 marks indicated little or lack of knowledge on how the parent rock, climate and living organisms influence soil formation. Some of the candidates in this category were able to define soil formation but they provided insufficient explanations on the influence of parent rocks, climate and living organisms in soil formation. Some mixed correct and incorrect points while, others provided incorrect descriptions with irrelevant conclusion. One candidate for example explained inadequately the factors for soil formation such as *soil formation refers to the soil to be productive due to influence of many factors like equatorial, tropical, temperate and mountain, permeable rock, production of humus and nutrients*.

Another candidate defined soil instead of soil formation and explained types of rocks such as *igneous, sedimentary and metamorphic rocks*. This candidate related parent rock with types of rocks and explained types of climate such as *equatorial, savannah and desert climate* as factors for soil formation. This candidate seems to be attracted by the word climate that misled the candidate to explain the types of climate. On living organisms the candidate wrote *decomposition of dead organic matter and vegetation growth*. Variation of their marks was a result of the magnitude of the weaknesses observed in their responses. Extract 7.2 is sample of a poor response.

7. Soil formation refers to the process in which they facilitate the occurrence of soil in the earth's crust. The processes of soil formation they are also referred to as "Pedogenesis." The factors for soil formation includes Organism, Climate, Time, Parent Rock as well as Relief or Topography. Starting with ~~Parent~~ ^{Climate} rock it facilitates the influence of soil formation due to the following;

Weathering; Weathering is one among the soil formation process that is influenced by Climate. Weathering is caused by high temperature as well as Rainfall whereby the soil forms slowly from one stage to the other. It removes the top soil and brings the new soil.

Leaching; On the contrary this is also the process in soil formation. Leaching refers to the removal of soil particles from horizon B where as it accumulates and forms something called Hard Pan and facilitates the occurrence of the top soil when the lower soil (which from upper stage to low then it makes the door for the other soil to occur.



Illuviation; This is one of the soil formation process in which it facilitates the occurrence of soil. Whereas Illuviation is the process of soil formation whereby the Horizon B subsoil transports its soil to the formation of hard Pan whereby on top of the Earth's crust it facilitates the formation of soil.

7	<p>In which they are facilitated by the Parent Rock. The Parent Rock is formed deep down the earth's crust hence when the Rock is penetrating it forms soil and on contrary facilitates the occurrence of minerals in the soil.</p> <p>Podsolisation; On the Contrary Podsolization is as well one of the soil formation process whereby it occurs deep down the earth's crust that is deep down in the Parent rocks. The process of soil formation in any aspect takes time so that soil can be formed hence in the Parent Rock soil formation is influenced by the process called Podsolization.</p> <p>Chelluviation; Lastly this is the soil formation process whereby this involves the Chemically means of soil formation. This soil formation process occurs deep down the earth's crust that is in the Parent rock but it occurs by the Chemical means but, facilitates to the occurrence of soil.</p> <p>Generally; The Parent Rock, Climate and as well the living Organisms influence the soil formation by the soil formation process. The soil formation process all depends on time so as to be occurred on the earth's surface. On the Contrary soil has alot of importance to human beings such as it facilitates the Economic Activities to occur, Building Materials, such as sand blocks and others. As well as soil facilitates easy transportation because it reduces the friction of road and vehicle.</p>
---	--

Extract 7.2: A sample of an incorrect response to question 7

Extract 7.2 is a sample of a part of an incorrect answer as the candidate explained processes of soil formation such as weathering, leaching, podzolisation, mineralization and chelluviation contrary to the demand of the question.

2.2 113/2 GEOGRAPHY PAPER TWO

This paper consisted of seven questions which were set from the following topics; Population and Development, Environmental Friendly Tourism, Manufacturing Industries, Transport and Communication, Sustainable Mining and Sustainable Use of Fuel and Power. The candidates were required to attempt five questions, whereby question number one was compulsory. Each question carried twenty (20) marks.

2.2.1 Question 1: Population and Development

The question required the candidates to describe eight strategies that have been adopted by Tanzania to mobilize her manpower since independence.

This question was compulsory and hence it was attempted by all the candidates (100%) whereby 36.7 percent scored from 12 to 20 marks, 29.1 percent scored from 7 to 11.5 marks and 34.2 percent scored from 0 to 6.5 marks. The general performance of the candidates in this question was good since 65.8 percent of them scored 7 marks and above. Figure 7 illustrates the performance in this question.

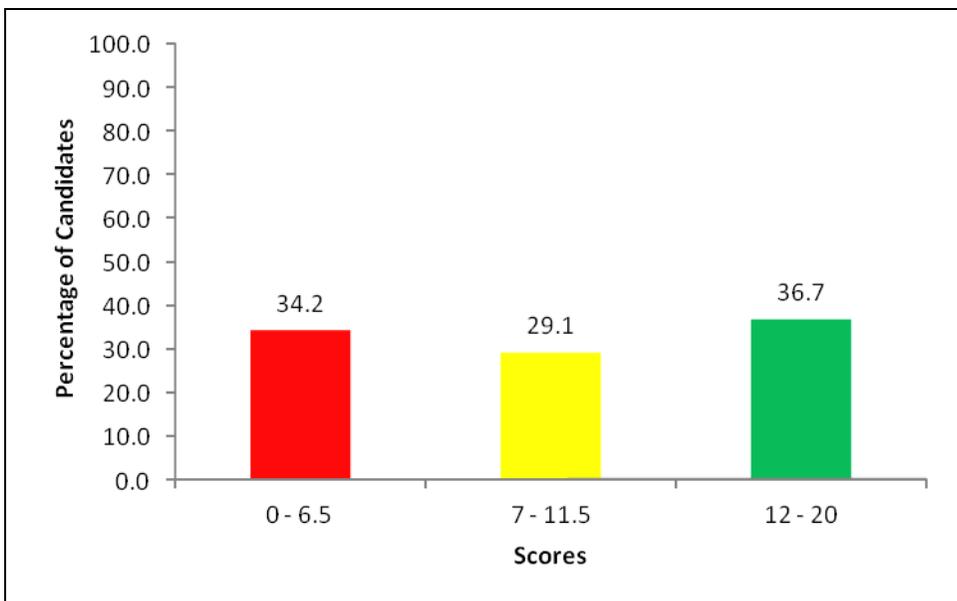


Figure 7: *Candidates' Performance in Question 1*

The candidates who scored from 12 to 20 marks had good knowledge on assessing the contribution of population policy and population management. They were able to explain the problems of implementing population policy in

Tanzania. Moreover, they were aware of the issue of manpower mobilization as it is discussed in various mass media like television, radio, magazine, newspapers and books. Therefore it was not a new issue to them.

Most of the candidates who scored higher marks managed to provide a relevant introduction of manpower mobilization and describe correctly the strategies that Tanzania has adopted to mobilize her man power since independence. The correct answers written by the candidates of this category were:

Establishment of small scale industries (SIDO); formation of groups so as to be given loans as capital such as SACCOSS, VICOBA, PRIDE AFRICA; establishment of small market places for small entrepreneurs and machingas like Machinga Complex in Dar es Salaam; opening more vocational centres; recruiting people in the public sectors; establishment of Ujamaa villages; introduction and reinforcement of manpower deployment; establishment of National Service Camps; provision of education and giving special training to the workers so as to improve the quality of their products.

These candidates supported their answers with examples.

In addition to that, some of the candidates in this category provided a relevant introduction and described few strategies for manpower mobilization in Tanzania. Others managed to give a correct response but failed to provide relevant examples. The variation of their scores was a result of the strengths and weaknesses of their responses. Extract 7.1 shows an example of a good response.

1.	<p>Manpower Mobilization, is the strategies of gathering people together so as they can use their potentials and bring about development in the society. There was high need to mobilize power in Tanzania in order to bring fast development and improving technology in the society.</p>
	<p>The following are the strategies that have been adopted by Tanzania to mobilize her manpower since independence:</p>
	<p>Establishment of ujamaa villages, In order to mobilize Manpower in the country government in 1967 under the late President Julius K. Nyerere established ujamaa village in which people were gathered together into small villages so as to participate in different social and economic activities so as to attain fast development.</p>
	<p>Recruiting people to National services camps, Government established special camps training camps such as Male, Mafinga, J.K.T Ruvu and Bunembwe in Kigoma all these camps we people and form six leavers get trained and participated in different activities such as in Agriculture and they peace and Preached peace and patriotism</p>
	<p>Establishment of small markets, in order to mobilize manpower in the society the government established small markets so as people may engage in trade and improve their standard of living - example of Markets established are Machinga Complex and Markets Nearby Karume Stadium in Dar-es-salaam. This aimed at benefiting small vendors or "Machingas"</p>

1	<p>Establishment of small scale industries</p> <p>The government in order to provide employment and supply goods and services to people established industries that was dealing with processing of goods this aided in mobilizing man power.</p> <p>Example the establishment of Small Industries Development Organisation SIDO, helped to bring people with different skills together and hence used their potentials to bring development</p> <p>Provision of employment, In order to mobilize man power the government employed people in different sectors such as hospitals, Agriculture, in mining and industries so as they can use their potentials to bring development in the society. Example nowadays the government employs experts, such as Doctors, Engineers and Teachers in order to bring positive changes in the society.</p> <p>Encouraging people to form small groups so as they can be given loans, the government has been encouraging people to form small groups so as they can be given loans to establish economic projects which could improve their living standards. Example Mama Mlipa Fund, VICOBA, FINCA and SACCOS has been providing financial assistance to these groups.</p> <p>Establishment of reinforcement deployment policy, some policies was introduced so as to bring people together and cooperate in economic activities such as Agriculture example "Nguvu Kazi" policy" this required people to work hard and not to wander in the street with no reason also another policies are "Hapa Kazi" te"</p>	
---	--	--

Extracts 7.1: A sample of a correct response to question 1

The candidates who scored from 7 to 11.5 marks had inadequate knowledge and skills on the concept of manpower mobilization. Some of them were able to give a relevant introduction about manpower mobilization and to provide

five strategies for manpower mobilization in Tanzania but they failed to provide satisfactory descriptions. Other candidates managed to give a relevant introduction and analyse only few strategies of manpower mobilization. Variation of their scores was attributed to the strengths and weaknesses of their responses.

Most of the candidates who scored from 0 to 6.5 marks provided an irrelevant introduction. They also mixed correct and incorrect strategies that have been adopted by Tanzania to mobilize her manpower. This shows that these candidates lacked adequate knowledge on the subject matter. One candidate for example described incorrect strategies such as; *improves food nutrition, high demand of needs, high need special care, improving growth development, government support and improving living standard* instead of, *establishment of small scale industries, establishment of Ujamaa villages and establishment of National service camps*. Extract 7.2 shows a part of an incorrect answer.

1	<p>Man power mobilization: For the growth of the mobilization like industry like textile industry are called are man power mobilization is a way towards achieving tangible Socio-economic development with reference they are strategies that used in manufactures and developed of "man power mobilization which are the.</p> <p>Availability of capital: Man power mobilization under to growth they should have to enough capital in that area that make to growth of the industry through the mobilization they are some of the capital they need more support to make sure they have development through capital developed.</p> <p>Availability of transport and communication: Under to make the mobilization of the industry they need more transport that helps to people to move from one place to another and by using the communication that used under to make the difference through education of the people. by getting man power and they have some way that used in the availability of it.</p> <p>Development of industry: Through movement of the inputs from industry that used as the one in the development of industry through the industry are the very source that helps in growth and they are are used on industry so man power mobilization to them one place to another and the how and they are some industry developed.</p> <p>Availability of enough skilled labour: They are used in the different activities as skilled labour that used in five different ways through the area and all skilled labour they have they are chance of finding the same at the of the different area through it some of it they are used in the different way of the developed through the labour skills to get they the labour.</p>
---	--

1	<p>Development of Science and Technology: Most of the technical developed due to the development of the man power mobilization and they are some of the Science and Technology that must be able to used in order to make the development of the Science and Technology, also they have to impartance on to grant the same knowledge.</p> <p>Availability of good infrastructure: Socio-economic development they need high infrastructure that used in order to make the development of the infrastructure that used in the different way they are used in infrastructure that can used on to good and they have ways of solving it through using of the infrastructure of the area through it.</p> <p>Encourage the government support: Social and economic are developed due to the increase the rate of the government supported and they are encourage of government and they have ways that used in order to development of man power mobilization through the development of the government supported and they way that used at the ending of the days.</p> <p>Increase in the number of skilled labour; Most of the man power developed due to the increase in the man power mobilization and they have ways that can be used on the making sure they have an increase in the time of workers that used in order to make the development of man power mobilization in Tanzania through the increase of the human activities.</p> <p>Generally: Manpower mobilization are very importance on the development of social economic development to the country through making an supported with other country to make the development among the area in the country through developed in the science and technology that can used in making sure they have development and capital to the country.</p>
---	---

Extract 7.2: A sample of a poor response to Question 1

In extract 7.2 the candidate provided an irrelevant introduction and explained the factors that favour development of manufacturing industries instead of strategies adopted by Tanzania to mobilize her manpower.

2.2.2 Question 2: Population and Development

The question required the candidates to explain how the utilization of resources and improvement of science helps to overcome overpopulation in developing countries by giving five points.

This question was attempted by few candidates (26.7%), however, the general performance in the question was good since 67.1 percent of the candidates scored 7 marks and above. Further data analysis shows that, 12.7 percent of the candidates who attempted this question scored from 12 to 20 marks, 54.4 percent scored from 7 to 11.5 marks and 32.9 percent scored from 0 to 6.5 marks. Figure 8 shows the performance in this question.

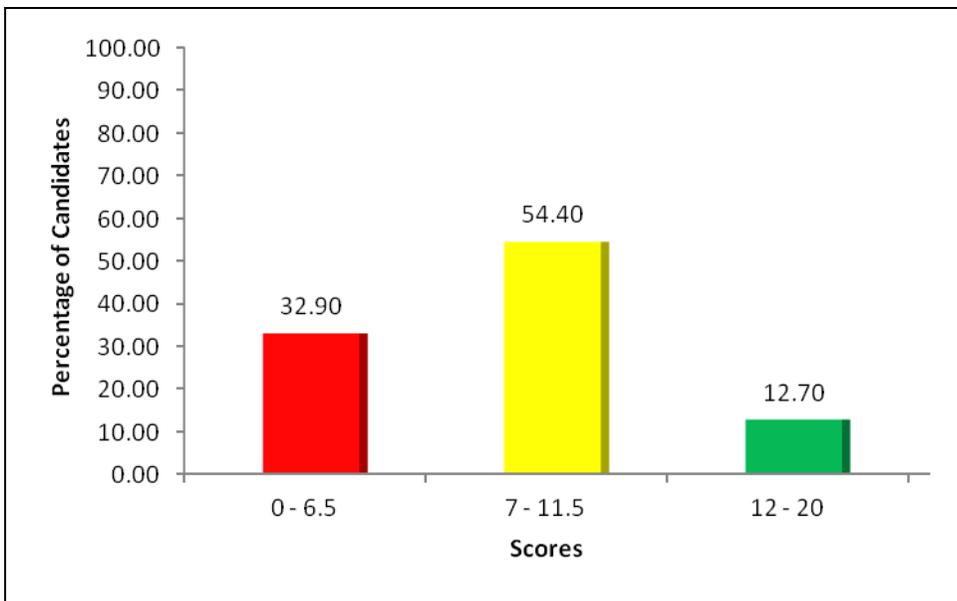


Figure 8: *Candidates' Performance in Question 2*

The candidates who scored from 12 to 20 marks focused precisely on the question demand. They managed to give a relevant introduction of the concept of overpopulation and also linked the utilization of resources through application of science so as to overcome overpopulation in developing countries. One candidate for example defined correctly overpopulation as: *the situation which occurs where there are too many people in relation to resources and technology locally available to maintain adequate standard of living. It is mainly caused by high birth rate, low death rate and immigration.* This candidate linked correctly the concept of utilization of resources through application of science in overcoming the issue of overpopulation such as:

Sustainable exploitation and utilization of natural resources such as land, improve production which in turn will boost the economy, improvement of transport and communication so as to open up areas which are under populated in order to influence urban-rural migration on overcoming overpopulation in towns, promote family planning and provision of basic incentives by the Government to meet the demand of the population and providing condition to control population increase.

Some of the candidates who scored higher marks provided an inadequate introduction on the concept of *overpopulation* and explained correct responses that help to overcome overpopulation but failed to give a relevant conclusion. Others failed to provide a relevant introduction but linked well with the utilization of resources through application of science in overcoming overpopulation. The variation of their scores was determined by the quality of responses.

The candidates who scored from 7 to 11.5 marks had moderate knowledge on the concept of utilization of resources through the application of science so as to solve the problem of overpopulation. Most of the candidates were able to give correct meaning of over population. They explained only few responses on how to overcome overpopulation through the utilization of resources and application of science without a relevant conclusion. On the other hand, some candidates mixed the responses concerning over population and population increase in relation to the utilization of resources. Other candidates provided inadequate explanations on their points which affected their performance by scoring not more than 11 marks.

The candidates who scored from 0 to 6.5 marks provided a poor introduction with few correct points coupled with unsatisfactory descriptions. Other candidates explained incorrect points on how utilization of resources and improvement of science helps to overcome over population in developing countries like: *utilization of resources lead to occurrence of conflict, global warming, diseases and unemployment*. All these reasons affected their performance and led them to score low marks.

2.2.3 Question 3: Environmental Friendly Tourism

This question required the candidates to examine four setbacks and four prosperities of tourism industries in East Africa.

Most of the candidates (93.3%) who sat for this examination opted for this question and the general performance in the question was good since 92.3

percent of the candidates scored 7 marks and above. Further data analysis shows that 40.6 percent of the candidates who attempted this question scored from 12 to 20 marks, 51.7 percent scored from 7 to 11.5 marks and 7.7 percent scored from 0 to 6.5 marks. Figure 9 illustrates the performance.

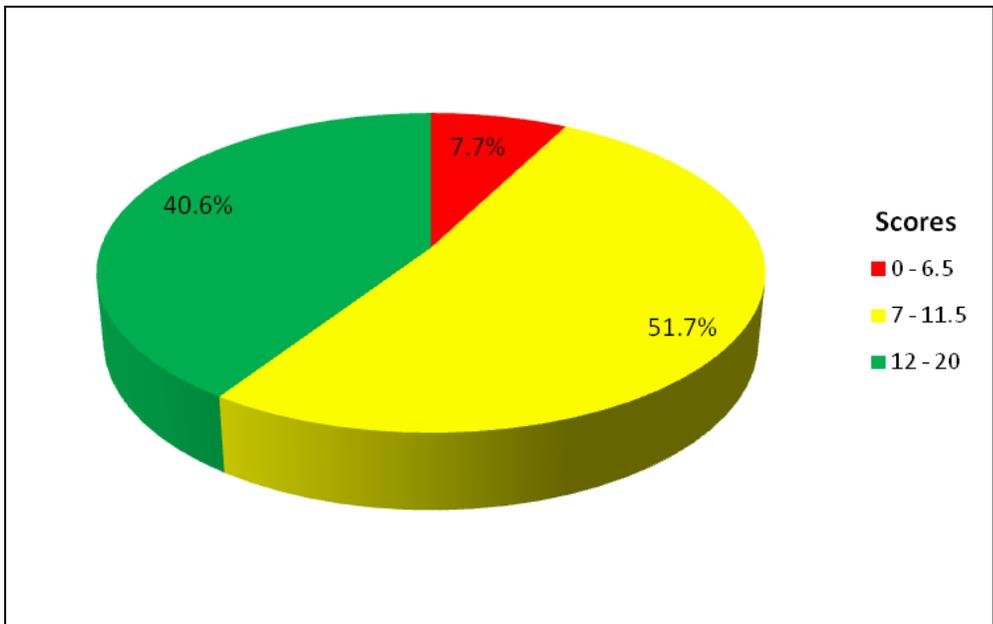


Figure 9: *Candidates' Performance in Question 3*

The candidates who scored from 12 to 20 marks responded well to the question by examining setbacks and prosperities of tourism industry in East Africa. They organised and presented well their ideas together with a relevant conclusion. Most of the candidates in this category managed to define tourism industry as: *the activities which involve the movement of people from their home to other places of great interest for the purpose of leisure, pleasure or studies*. They examined its setbacks in East Africa which are: *poor transport and communication, poor advertisement of honey pots, political instability and low capital*. These candidates explained four prosperities of tourism industry in East Africa such as;

It has provided employment opportunities, it has brought opportunities for recreational centres and enjoyment, it has facilitated the fast development of science and technology, it encourages positive attitude towards environmental conservation.

They also provided a relevant conclusion. Extract 8:1 is a sample of a part of good response.

03.	<p>Tourism is the process of moving from one area to another for learning, studying or leisure. Tourism can be domestic tourism or international tourism, domestic tourism involves movement within the country boundaries while international tourism involves movement across the national borders. Tourism industry in Africa has been very advantageous, the following are the setbacks of tourism industry in East Africa</p>	
	<p>Poor transport and communication networks, that is tourism industry in East Africa is drawn back due to the presence of poor transport and communication networks for example in Tanzania tourism industry in the southern circuit lags behind due to the poor transport systems compared to the northern of Tanzania where tourism sector has developed despite the government is planning on improving the transport network such as roads and railway.</p>	
	<p>Increased risk of terrorist attacks, that is tourism sector or industry is faced by the problem of tourist attacks where by tourism increases the risk of terrorist attacks in the country hence this sets back the</p>	

Q2	<p>prosperity of tourism due to fear of inviting Terrorist in which it may lead to huge effects in the country for example the Terrorist attack in West Gate in Kenya 2013 this created fear in East Africa</p>	
	<p>The problem of poaching, that is the tourism sector in East Africa is affected by the problem of poaching where by some animals are totally lost due to the poaching problem and hence leading to decline in the tourism industry, the poachers tend to be interested with elephant tusks and other valuable animal species hence loss of valuable animal species.</p>	
	<p>Low involvement of the local community in the tourism industry, that is the tourism industry is faced by the problem of low involvement of the local members, population living near the tourism areas in which when problems like poaching occurs they fail to give out information since there is low communication link between them. The following the prosperity of tourism industry in East Africa increased in employment opportunities, that is people are employed in the tourism attraction as tour guides</p>	

Q3. security officers and hence has helped in reduction of the unemployment rate in the country, the Tourism industry has provided employment through the Ministry of Tanzania National parks that deals with National parks (TANAPA) hence increase in government revenue.

led to international recognition that is East Africa has been known through the presence of different tourist attractions found for example The Maasai culture, waterfalls, Mountain Kilimanjaro, hence the world recognize East Africa as an area of tourist attraction and hence attract more foreigners in East Africa for investment due to the world wide recognition.

increase in Government Revenue, that is the tourism industry in East Africa has highly contributed to the increase in government revenue of different government for example Tanzania has highly developed its national income due to the higher revenue from the Tourism industry which has also helped in modernizing other industrial sector in the country.

increase in foreign currency accumulation, that is the tourism industry

<p>03.</p>	<p>has been a blessing to East Africa due to that it has increased the accumulation of foreign currency in the government due to high level of tourists from abroad for example Rwanda is internationally known since it printed the shahili words "KARIBU RWANDA" in March after united forces hence a lot of tourists from abroad visit Rwanda.</p> <p>Therefore the tourism industry in East Africa has prospects such as planning to advance transport and communication, to provide environmental conservation, open up new areas for tourist attractions.</p>	
<p>MAP OF TANZANIA SHOWING TOURIST ATTRACTIONS.</p>		

Extract 8.1: A sample of a good response to question 3

Furthermore, the candidates who scored from 7 to 11.5 marks had inadequate knowledge on setbacks and prosperities of tourism industry in East Africa.

Most of them gave a relevant introduction but unsatisfactory explanations on prosperities of tourism industry in East Africa. Others provided explanations about setbacks of tourism industry only while other candidates provided few setbacks and few prosperities of tourism industry in East Africa. Other candidates were not able to explain four setbacks of tourism in industry but were able to explain prosperities of tourism industry in East Africa and providing relevant conclusions. Some candidates outlined the setbacks and prosperities without explaining them while, others did not understand the meaning of the word setbacks which led them to provide wrong answers hence their marks varied.

There were a few candidates who scored from 0 to 6.5 marks due to lack of knowledge. Some candidates mixed prosperities with setbacks interchangeably. One candidate for example wrote effects of tourism industry in East Africa as: *increase of crime, increased environmental pollution, influence of culture* instead of setbacks of tourism industry in East Africa. This led to the variations of scores of the candidates in this category. Extract 8.2 is a sample of a poor response.

03.	<p>Tourism refers to the movement of people from one place to another either for educational purposes or for recreational / leisure purposes. There are two types of tourism international and domestic tourism. Tourism is one among the common economic activity in East Africa thus lead to the prosperity or some setbacks to the tourism industry.</p>	
	<p>The following are the prosperities of tourism industry in East Africa;</p>	
	<p>Availability of tourist centers; Tourism in east Africa is growing fast due to the availability of enough tourist attraction centres in it that attract tourists from different part of the world. For example of such tourist attraction in East Africa are like National parks; Mountain Kilimanjaro and some historical sites like Amboni Caves in Tanzania.</p>	
	<p>Available peace and security; Most people in the world like to move or stay in places with an availability of peace and security of both lives and properties. This is an important factor for the prosperity of the tourist industry. In East Africa such that more people become attracted hence increased in the level of countries foreign revenue. Peace and security is an outcome of political stability in the East Africa.</p>	
	<p>Development of transport and communication networks; Development of the transport and communication sector in Tanzania has stimulated a quick prosperity in the tourism industry in Tanzania and other Eastern African countries. This is due to fast growth and quick movement from one place to another for tourism reasons.</p>	
	<p>Development of these sectors are stimulated by the technological</p>	

03	development in East Africa.	
	Favourable climatic conditions, and freedom from natural hazards; Tourism in East Africa is developing to the available climatic conditions favouring such economic activities. East Africa has no harsh climates to endanger the lives of people and their properties. Also freedom from the natural hazards such as earthquakes and hurricanes attracts more tourists to visit the country.	
	The following are the setbacks of tourism industry in East Africa;	
	Emergence of terrorist groups; Tourism industry in East Africa sometimes declines due to the emergence of terrorist groups that kill and destroy properties and people hence alter the peace and security conditions of East Africa. For example the Al-Shabab who attacked Kenya few years ago.	
	Eruption of diseases such as Corona; Tourism industry is highly affected by this factor world wide. The Eruption of pandemic disease affects people movement from one place to another due to the fear of the particular disease hence no tourism. For example the COVID 19 affected the East African-tourism industry in an unexpected way.	
	Emergence of social crisis; Tourism in East Africa is declining due to the emergence of social crisis such as the killing of the tourists or due to robbery behaviour of the African people due to poverty. Such problems discourage tourists from visiting the areas known for such behaviour. The government should punish such people strictly when caught because a decline in tourism industry leads to a decline in the government income.	

Extract 8.2: A sample of a poor response to question 3

In Extract 8.2 the candidate explained the factors favouring development of tourism industry and negative impacts of tourism activities instead of prospects and setbacks of tourism industry in East Africa.

2.2.4 Question 4: Manufacturing Industries

This question instructed the candidates in eight points, to support the statement which reads “For decades since independence, Tanzania has adopted several strategies to modernize her manufacturing industry”.

This was one of the highly opted questions since 79.4 percent of all the candidates who were registered for this examination attempted it. The general performance in this question was good since 90.7 percent of the candidates who answered it scored 7 marks and above. Further data analysis showed that 32.8 percent scored from 12 to 20 marks, 57.9 percent scored from 7 to 11.5 marks and 9.3 percent scored from 0 to 6.5 marks. Figure 10 illustrates the performance.

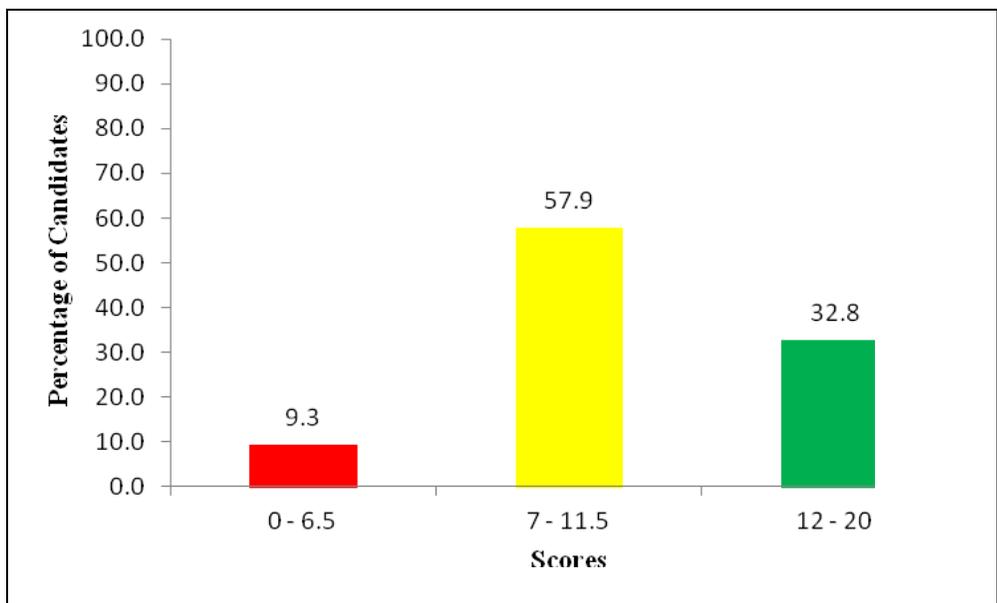


Figure 10: *Candidates' Performance in Question 4*

Most of the candidates who scored from 12 to 20 marks described correctly the strategies of modernizing manufacturing industries in Tanzania. Most of them supported the statement by giving eight points with relevant explanations. Others provided a relevant introduction but with inadequate explanations about several strategies of modernizing Tanzanian manufacturing industries and also gave an unsatisfactory conclusion. The correct answers written by most of the candidates were: *improving science and technology through training and educating people, improving transport and communication, improving market system, improvement of infrastructure, improvement of energy supply, and improvement of favourable industrial*

government policy. The variation of their scores was determined by the quality of essays of individual candidates and the total number of points provided in relation to the demand of the question. Extract 9:1 represents a sample of a correct response.

4.	<p>Manufacturing industry is the type of industry which involves the production and the change of raw materials into manufactured goods. It involves production of goods from different economic activities like agriculture, mining, forestry, fishing. Example of such raw materials are cotton, coffee, fish, minerals like diamond. There are several strategies adopted by Tanzania to modernize her manufacturing industries including the following:</p> <p>There is improvement of infrastructure like roads, railways; Due to the improvement of transport and communication systems, has enhanced easy transportation of raw materials from production areas to the manufactured area. Example transportation of cotton and coffee from agricultural centre to the industries help to the modernization of industry.</p> <p>There is improvement of science and technology; Example the use of experts. Many experts are being employed in manufacturing industries so as to run the activities of production. This has encouraged the development of industrial sector in the country. Also it has encouraged the production of good and qualified products needed by the people for their uses.</p> <p>Availability of adequate capital; Example high investment in industry. In Tanzania high capital is invested in manufacturing industry so as to encourage more modernization and more development of the sector. And most of the capital is used in repairing different products</p>
----	--

4. needed in industry and some of it used for paying workers in the industry since not all are employed by the government.

Availability of both skilled and unskilled labour; Example in Textile industries many people are needed. This enable the higher number of people to be employed as labourers in such sectors as the result of development of the sector at large. Also many labourers are needed for performing the activities which never be performed by the machines,

There is improvement in the quality of products like aluminium; Many of the products from manufacturing industry in Tanzania being improvement so as to encourage more advertisement even outside the country. This has increased high rate of development in the sector.

There is highly improvement of marketing systems for industrial products; Example, many goods produced in Tanzania have got high market outside the country simply because of being improved. This has lead to the access flow of customers from many outside countries like Kenya, China. Also has lead to good and largely advertisement of Tanzania Manufacturing industry.

There is availability of enough power supply like Hydroelectric Power (HEP); Due to the existence of enough power supply in Tanzania many manufacturing industry still producing qualified and good and enough products needed by the people for better development of themselves and the nation at large.

4.	There is availability of industrial inertia and policies; Example special industrial developmental programmes (SIDP). Example the establishment of small industries (SIDs) helps to the more modernization of industries especially manufacturing industries in Tanzania. This has promoted the large scale development of manufacturing industry in the country (Tanzania).
	Generally; Manufacturing industry in Tanzania play a great role since has many important functions. These including helps in diversification of economy of the country, provides employment to the people, source of income, promote the development of other economic activities like tourism, leads to the improvement of transport and communication systems like roads, railway, harbours.

Extract 9.1: A sample of a correct response to question 4

Some of the candidates who scored from 7 to 11.5 marks were able to understand the demand of the question though they provided few strategies to modernize manufacturing industry in Tanzania. Some of them managed to write the required number of points but failed to explain them clearly. Others mixed correct and incorrect strategies thus their scores could not attain total marks of the particular question. One candidate for example provided a relevant introduction and also the candidate explained correct points such as *improving science and technology, formulation of government policy, control of population, Tanzania should involve international organisation* however, the candidate mixed the answers with factors for development of industries like *availability of capital, labour and market*.

The candidates who scored from 0 to 6.5 marks had little or no knowledge of strategies to modernize manufacturing industry in Tanzania. Most of the candidates in this category were not well informed on the strategies to modernize manufacturing industry in Tanzania. One candidate for example provided a relevant introduction but explained only one correct strategy i.e *application of modern methods of production* and incorrect ones such as *increase production of raw materials, use of good technology, access in marketing for the goods, supporting of the local manufacturing of industries*

and good provision of labour. Another candidate provided an unsatisfactory introduction, mixed correct and incorrect points such as: improvement of transport and communication, presence of government policy, privatization, agricultural activities and expansion of market. Extract 9:2 represents a sample of a poor response.

4	<p>Manufacturing Industry. This is the manufacture of the raw materials from the industry through different machines. The following are the reasons Tanzania has adopted several strategies to modernize her manufacturing industry:</p>
	<p>Availability of capital. This is because on the development of the different sectors roads, the availability of the capital which can be used for the different development of the industrial manufacturing of the goods. In Tanzania example for the development of the sector also ways roads, the availability of capital that way it have adopted several strategies in manufacturing industry.</p>
	<p>Availability of raw materials since manufacturing of industry needs for the quality of the raw material which are very important for the development of the manufacturing of the industry in Tanzania. example in our country needs the availability of the raw material, so as to make easily development of the manufacturing of the industry in Tanzania. through which means that the occurrence of the improvement on the development of the manufacturing industry.</p>
	<p>Availability of science and technology. This is because for the manufacturing of the science and technology in Tanzania need to have advance science and technology so as to improve in and outside the country in which means that need to have the occurrence of the improvement of the manufacturing industry.</p>

4

Improvement of the government support through the development of manufacturing of the industry in Romania example through government support provided the assurance of the support that will bring about the development of science and technology within the country in which means that the manufacturing industry also needs the support from the government so as to develop its activities in and also outside the country.

Improvement of the ~~raw materials~~ ^{market}. This is because on the manufacturing industry needs high assurance of the raw materials which can be used in the manufacturing of the different materials which make early improvement in the industrial activities through the assurance of the raw material which can be used in the industry which can be very important into which there is need to the improvement of the manufacturing industry in Romania. Example most of industry in Romania have developed through the presence of the raw material like the Cement Industry Urziceni have being developed through the availability of raw materials.

Improvement on transport and communication. This is because through the development in the manufacturing of the industry in Romania needs to have good improvement of transport and communication in Romania for easy development manufacturing industry because there is used of transportation of the raw materials from one place to another in the country.

4	Improvement of water supply and power supply
	<p>This is because now days in Tanzania there is improvement on power supply due per the forming of the new electricity construction at Mtwara that make easy development of manufacturing of industry in Tanzania. example in the industry there is production of the different machines, which can be used for the manufacturing of the different products which are used in the industry development.</p>
	<p>Improvement of labour employment. This is because from the manufacturing of industry of Tanzania have develop on the employment of the labour can be skilled labour but also unskilled labour which are very important for the development of the industry in Tanzania through which in the improvement of the industry needs to have labours which can be used for the different activities to the industry.</p>
	<p>Generally manufacturing industry also have it's important like help in the science and technology, help improvement of the living standard of the people, also it helps to employment opportunity.</p>

Extract 9.2: A sample of a poor response to question 4

In extract 9.2 the candidate described factors for development of any manufacturing industry instead of strategies that have been adopted by Tanzania to modernize her manufacturing industries.

2.2.5 Question 5: Transport and Communication

This question instructed the candidates to explain four economic importance of transportation through pipeline and indicate four challenges of construction of pipelines in East Africa.

The question was attempted by 71.6 percent of all candidates who registered for this examination of which, 32.9 percent scored from 12 to 20 marks, 48.9 percent scored from 7 to 11.5 marks and 18.2 percent scored from 0 to 6.5 marks. The general performance in this question was good since 81.8 percent of the candidates scored 7 marks and above. Figure 11 illustrates the performance in this question.

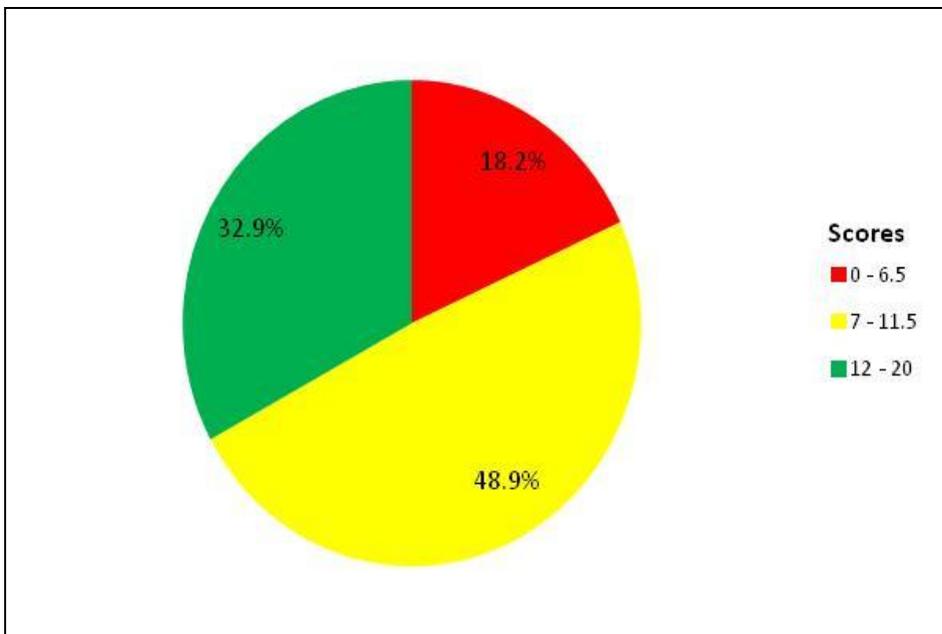


Figure 11: *Candidates' Performance in Question 5*

The candidates who scored from 12 to 20 marks had adequate knowledge of pipeline transport. They were able to introduce correctly pipeline transport, explain four economic importances of pipelines transport and four challenges of construction of pipelines in East Africa and finally they wrote a relevant conclusion. One candidate for example defined pipeline transport *as the means of transport which involves carrying of liquids especially oil and gas from one area to another, for example TAZAMA pipeline*. Most of the candidates explained four economic importance of transportation through pipeline which are: *stimulate industrial development because of oil supply in the countries, stimulate development of trade between the countries sharing the pipeline,*

they have led to the creation of employment and generation of national income.

Moreover, the candidates indicated four challenges of the construction of pipelines in East Africa such as: *political instability in East African countries, poor cooperation among East African countries, lack of skilled and trained labour power, and low technology for construction and maintenance.* Extract 10.1 represents a sample of a good response.

5		
	Pipeline transport refers to the	
	land transport which involves installation of pipes	
	and transporting goods through pipes. Example;	
	oil, gas, petrol and so forth. Notable example	
	is the TANZANIA pipeline in Tanzania to	
	Zambia, which transports oil (fuel) from	
	Dar-es-Salaam Tanzania to Zambia passing	
	underground. There are several importances of	
	pipeline transport. Briefly include the following;	
	Employment creation. This is	
	one of the advantages of pipeline transport. The	

5 mode has employed great number of people for example, engineers, managers, directors of which all this earn income which has improved their living standards. For instance, they take their children to school, afford several services and so forth. Thus, pipeline transport has created employment.

Source of foreign currency or forex. This is another importance. This is through trade carried through exchange of goods and services that has enabled countries get forex which is a source of government revenue. As a result has led to increase in economy level thus growth and development of various sectors. Thus, pipeline increase forex reserves in the country.

Source of government revenue. This is another significance where as pipeline has led to increase in government revenue. This is through trade where she acquires foreign currency which is therefore increases the government revenue and hence promote economic growth. Example, Kenyan Shillings, Ugandan Shillings, Zambian Kwacha and so forth. Thus, pipeline increases government revenue.

Promote international other sectors. Pipeline transport is important for it boosts other sectors example Trade and Industry. Notably the Darake Cement Making Industry in Mtwara has been established due to presence of gas and pipeline transport. Hence, it promotes economic growth and development thus through

5 ^o	economic diversification. Therefore pipeline main transport is a tool to boost other sectors in the economy.	
	The following are challenges facing the pipeline transport	
	Poor technology. in installing the pipes. This is one of the major constraints that have led to malfunctioning of the transport system. There have been several leakages which impose great danger to the people living near the pipes. Thus poor technology has led to the failure of proper functioning of the transport system for example in Kenya.	
	High init capital especially when installing and renovating the pipes. This is another constraint which arises due to poverty of which many of the East African countries can not afford this technology. Poverty has made the pipeline transport to function properly and thus impose a challenge to the transport means. Example, In Uganda	
	Unskilled manpower and labour problems. This is another constraint of the transport system of which there is a limited number of skilled labour in this sector; many lack the knowledge on dealing with the pipes and thus leads to delay ^{response} a ^{response} increase of any leakages of which this can bring other problems to the societies surrounding. For instance, in Tanzania these cases are so common.	
	Poor climate is also a great challenge to this type of transport where as excessive rainfall	

Extract 10.1: A sample of good response to question 5

The candidates who scored from 7 to 11.5 marks provided inadequate explanations on the importance of pipeline transport in East Africa. Some mentioned correct points but explained them wrongly and some managed to explain four economic importance of transport through pipelines but failed to indicate four challenges for construction of pipelines in East Africa. One candidate for example mixed correct and incorrect importance of transportation through pipelines such as *generates income, prevent pollution, it is not risky* and *linkage*. The candidate also explained correct challenges for construction of pipelines in East Africa like *lack of capital* and *lack of skilled labour*. Another candidate provided an irrelevant introduction, explained three correct economic importance of transportation through pipelines such as *development of industries, provide employment* and *source of national income* but also wrote irrelevant challenges such as *it affects peoples' settlement*.

Some of the candidates who scored from 0 to 6.5 marks failed to provide a relevant introduction but managed to point out a few importance of pipeline transport but failed to give any challenge for its construction. Other candidates mixed importance and challenges of constructing pipeline transport. One candidate for example provided an unsatisfactory introduction of pipeline transport as: *transport network through pipes* and gave an incorrect importance of pipeline transport like: *building good interrelationship between countries, improving living standard of the people*. Another candidate provided a relevant introduction but explained incorrect importances of pipeline transport such as; *it helps in transporting goods, it is cheap* and *needs high technology*. Extract 10:2 shows a sample of poor performance to question 5.

Sl.	<p>Pipelines, this are line under ground</p>
	<p>the surface were by pipe are being placed for the transportation of different materials.</p>
	<p>Pipe line in East Africa has got economic importance but also has got challenges to the country of East Africa like Tanzania, Uganda, Kenya, Burundi extra. The following are the importance of pipeline in East Africa.</p>
	<p>It transport oil from the dead organic matter which dies long time ago, when they decompose they make crude oil which become transported by pipelines to the surface were by can be used for different activities.</p>
	<p>It transport gases such as petroleum gases were by can be used to conduct machines for example in industries, so due to that it become important to East Africa due to that it gives out petroleum gas.</p>
	<p>It transport hydroelectric power, where by it source is water which pass through through to those pipe to regenerate power which can be used for different purpose for example domestic activities.</p>
	<p>It transport energy from the waste products such as geodes for the different purpose in different field, domestic use: industrial use to control machines so as to operate. so due to that pipeline has got importance but apart from that pipeline activity have got challenges facing it, the following are those challenges.</p>

Extract 10.2: A sample of a poor response to question 5

In extract 10.2 the candidate described materials which can be transported through pipeline such as gas, oil and geothermal energy instead of importance of transportation through pipelines.

2.2.6 Question 6: Sustainable Use of Fuel and Power

This question instructed the candidates to argue for the statement that “Although nuclear energy is disastrous; it still is a prosperous source of energy in the world”.

The question was attempted by only 30.2 percent of all candidates who sat for this examination. The general performance in this question was good since 68.6 percent of the candidates who attempted it scored 7 marks and above. Further data analysis showed that only 14.3 percent scored from 12 to 20 marks, 54.3 percent scored from 7 to 11.5 marks and 31.4 percent scored from 0 to 6.5 marks. Figure 12 illustrates the performance in this question.

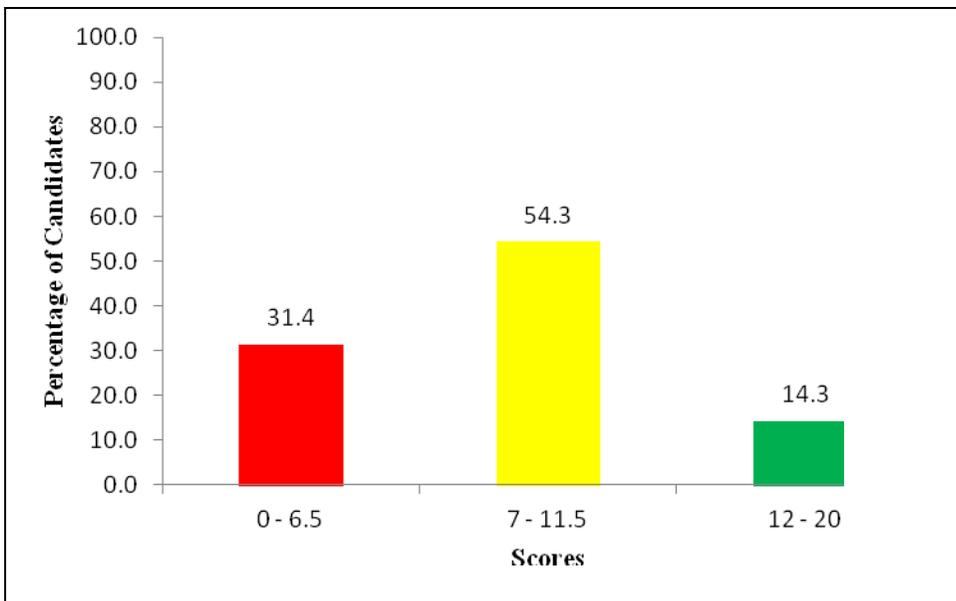


Figure 12: Candidates' Performance in Question 6

The candidates who scored from 12 to 20 marks had a clear understanding of the concept of nuclear energy. Their essays were well structured with cohesive paragraphs. These candidates were able to give a relevant introduction. Their ideas were well structured and presented consistently in relation to the question. One candidate for example introduced nuclear energy *as the non-renewable source of energy produced as the result of the reaction of the nuclei of radioactive metals like Uranium*. These candidates presented the reasons why nuclear energy is a prosperous source of energy such as: *it is clean and produces less greenhouse gases, it is efficient in terms of use, it is very economical and cheap to harness, it is source of foreign income and it is*

source of energy to heavy industries. Extract 11:1 represents a sample of a good response.

⑥	<p>Nuclear energy is obtained due to reaction of Nuclear elements and radioactive metals example Uranium. This source of energy is disastrous because if it is poorly disposed it may result into health problems example In 2011 Japan. However it is an Efficient source of energy and economic energy. The Major utilizes of nuclear power are South Korea, And Japan as well as United states of America. Although Research studies show that Uranium has been found In Tanzania which is a major component of nuclear energy harnessing. I agree that even if it is disastrous but it is still prosperous energy of the world by the</p> <p>The following proves that nuclear energy is still a prosperous source of energy</p> <p>It is an Environmental source of energy: Nuclear Energy is clean and does not pollute the environment thus it makes it to be prosperous though it results into health problems its demand is high worldwide hence it is a renewable energy source which makes it to be a prosperous source of energy</p> <p>It is an Efficient source of Energy: Nuclear Energy yields a large amount of power or energy which is enough to control countries activities example South Korea country as well as Japan which uses this power to in its economic activities thus it makes it to be an efficient source of energy</p> <p>It is an Economic Source of energy: Nuclear energy is said to be economic such that it uses small size of input to produce large amount of power thus its demand is still high because it is essential and economic sustainable</p>	
---	---	--

6	<p>It stimulates Industrial Activities: Nuclear energy production is large enough to be used to run machines in industries. Example, Japan this energy runs its machines sequentially however its plants may cause earth tremors as in Nagasaki 1945 still it is a prosperous source of energy in the world.</p>
	<p>It enables employment Opportunities: Skilled Personnel are employed into those sector of harnessing Nuclear energy as a result it improves the living standards of people's lives since it generates income which is high enough to meet needs of people thus it is a prosperous source of energy.</p>
	<p>It is a power of Countries Defence and security: It is well known that this energy has adverse effects on health as well as it can kill more than Million people in a minute. Thus a nation which harnesses it as well as it makes desires to other Nations to harness it thus both nations kinds are assured of security during Wars since if it dispersed the Billions of people would die. Example, 1978 Fukushima in Japan.</p>

Extract 11.1: A sample of a correct response to question 6

The candidates who scored from 7 to 11.5 marks showed insufficient knowledge of nuclear energy. They failed to argue competently on why nuclear energy is a prosperous source of energy in the world and they provided irrelevant conclusions. One candidate for example provided a relevant introduction, explained correct points such as *less greenhouse gas, it is cheap to use and economical, source of foreign exchange and develops other industries* but mixed them with disadvantages of nuclear energy such as *it is used in war hence it causes death and environmental pollution*. Variations of their marks were caused by strengths and weaknesses of their responses.

Most of the candidates who scored from 0 to 6.5 marks failed to understand the demand of the question though they were able to give a proper introduction. Some managed to provide few reasons but failed to provide conclusion. One candidate for example provided a relevant introduction but explained factors for development of industries such as *good government policy, advanced transport and communication, presence of skilled and unskilled labour, availability of adequate capital, good government support, availability of advanced science and technology and presence of both internal and external market* instead of reasons why nuclear energy is a prosperous source of energy. Another candidate provided an irrelevant introduction, mixed correct and incorrect points such as; *it stimulates development of other industries, it is clean, growth of nuclear market and enough weapons to be used during war*. Extract 11.2 is a sample of a poor response in this question.

6.	<p>Nuclear energy: is the source of energy</p>
	<p>which are formed from nuclear structure of an atom. Nuclear energy is still prosperous source of energy in the world for example Tanzania, Kenya, Uganda, Japan, China and others. Although nuclear energy is disastrous, it is still a prosperous source of energy in the world due to;</p>
	<p>Availability of material deposited for nuclear energy production such as atoms. Nuclear energy is still a prosperous source of energy due to its availability in many country in the world there is material such as nuclear atom for example in Tanzania, china and others.</p>
	<p>Availability of transport and communication system such as road, railway, water transport and other. Due to transport and communication system may influence to still prosperous nuclear energy as source of energy because of presence of transport which help in transportation of nuclear energy from industries to the markets.</p>
	<p>Availability of government support. In some country in the world, the government may support the use of nuclear energy than other source of energy due to its availability for example in Tanzania the government were allowed to use nuclear energy in different activities especially in industries and also other country use nuclear energy to make nuclear bomb which help during wars.</p>

6.	Availability of capital; Nuclear	
	energy is still a prosperous source of energy in the world due to capital availability to invest in nuclear energy production. for example in some country in the world such as Tanzania, Kenya, china provide capital or loans to the people that deal with nuclear energy production.	
	Availability of skilled and unskilled labour: In the world there is skilled and unskilled labour who participate in nuclear energy production for example in industries deal with nuclear energy power and therefore nuclear energy is still a prosperous source of energy in the world.	
	Availability of internal and external markets; Also nuclear energy is still a prosperous source of energy due to market available for example some country like Japan and china use nuclear energy to manufacture nucleated boom and therefore were still use as a source of energy	
	power and energy supply. Due to availability of energy and power supply also may support nuclear energy to still use as a source of energy. for example energy and power are used in industries to extract nucleus and other atom in order to form nuclear energy for use in different activities and hence it increase government revenue and expansion of market	

Extract 11.2: A sample of poor response to question 6

In extract 11.2 the candidate described the factors which led to development of nuclear energy instead of advantages of nuclear energy compared to other sources of energy.

2.2.7 Question 7: Sustainable Mining

In this question, the candidates were required to describe five negative impacts of mining industry in developing countries and to suggest three ways of mitigating them.

This question was among the highly opted ones as it was attempted for by 98.2 percent of all candidates who sat for this examination. The general performance in this question was good since 96.2 percent of the candidates who attempted it scored 7 marks and above. Further data analysis showed that 59.7 percent scored from 12 to 20 marks, 36.5 percent scored from 7 to 11.5 marks and only 3.8 percent scored from 0 to 6.5 marks. Figure 13 illustrates the performance in this question.

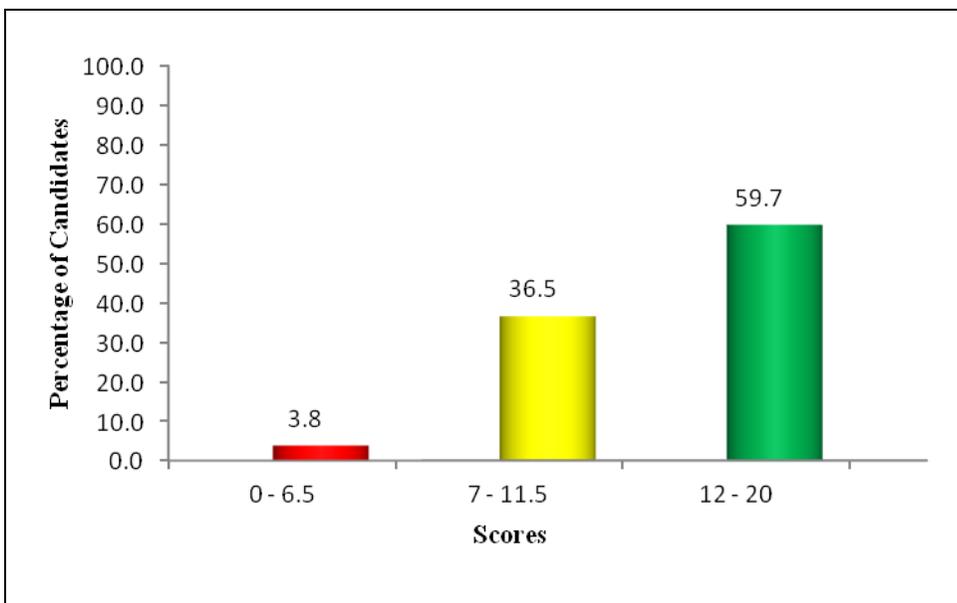


Figure 13: Candidates' Performance in Question 7

The candidates who scored from 12 to 20 marks had adequate knowledge on the topic of Sustainable Mining. Most of the candidates in this category provided a correct introduction, described negative impacts of mining industry in developing countries and suggested correct ways of mitigating them. Most of them defined Mining as: *the extraction of minerals from the ground like Gold, Diamond and Tanzanite*. Furthermore, they described negative impacts of mining industry in developing countries like: *deforestation, loss of biodiversity, land degradation, spread of diseases and pollution*. Moreover, the candidate suggested ways of mitigating the negative impact such as: *Providing mass education on proper mining extraction, economic diversification,*

reduction of population pressure around mining areas and reclaiming the area which has been affected by mining like planting trees. Some candidates provided a relevant introduction and described few negative impacts of mining industries in developing countries. Variations of their marks were caused by strengths and weaknesses of their responses. Extract 12.1 shows a sample of a good response.

9.	Describe 5 negative impacts of mining industry in developing countries and ways of minimizing them.	
	Mining is the process of extracting minerals from the underground.	
	Minerals are the valuable stones that occur by nature as a result of composition of minerals together. Examples of these valuable stones (minerals) are Gold, silver, diamond, Tanzanite, Rubij, Coal, Mica, Natural gas etc. The following are the negative impacts of this mining activity and also the ways to minimize them.	
	The negative impacts are as follows;	
	Environmental pollution; This is the process of introducing unwanted harmful substances to the environment.	
	This can be either water, land, air or noise pollutions. Mining can play a role of polluting in the environment in the sense that the mercury that's used in the washing of minerals is spilled onto the ground. Also the noises due to the movement of the large chilling machines to the ground.	
	Desertification; This is the process of making deserts where there is no deserts. This can be due to many factors both human and natural factors, human factors being the main cause of desertification. Mining as one of	

7 as one of the human cause of desertification people are forced to cut trees for the process of mining; for instance there is presence of minerals in a forested areas, the labourers are then forced to cut the trees deliberately leading to desertification as the effect of lack of rainfall.

loss of biodiversity; This is the process whereby some animal/plant species tend to disappear from the earth. This is mainly due to the change of the world's climatic pattern and the human activities. The human activities such as mining can play a role of loss of biodiversity in the sense that the tree species cut from the forest areas for the purpose of mining have now disappeared

land degradation; This is the process of turning the useful land into inhospitable land. This can be done by reducing its quality of production process, reducing its capacity to sustain buildings. Mining has led to land degradation as it has initiated soil erosion. This has taken place when there's much tilting of the land making it loose and prone to the erosion process hence land infertility. Also occurrence of land scars due to the holes left after the process of mining can act as a breeding site of the mosquitoes when holes filled with water.

7.	<p>It can lead to population pressure; This can come about when the population of an area doesn't balance with the available resources. The mining activity can come about bringing population pressure by the sense that people mostly migrate to the potential areas such as mining areas. This is so as to allow the employment creation.</p>	
	<p>The problems due to mining can be altered by the following methods;</p>	
	<p>Afforestation and reforestation programmes should be encouraged;</p>	
	<p>Afforestation is the process of planting trees where they are not available. And reforestation is the process of planting trees where available or not. This is done with the aim of minimizing the effects of global warming on the earth. The trees can provide oxygen that can dilute the harmful gases in the atmosphere.</p>	
	<p>The use of alternative sources of energy; such alternate sources are like Biogas, electricity, solar etc. The bad methods of energy are like the use of fuelwood, charcoal which tends to emit some harmful gases such as carbon monoxide (CO_2) into the air that in turn leads to the global warming. These alternative sources of energy tends</p>	

7	to not emit harmful gases into the surroundings.
	Mass education to people; The people should be imparted with education that is useful to the environmental conservation process. The people in the developing countries are illiterate meaning that they lack some knowledge in important things such as environmental education. So the government should provide the education to people about the importance of conserving the environment.
	In nutshell, mining is having great importances to our daily lives and also to the nation at large by providing employment to people, Improves the people's life standard, Leads to generation of the country's income.

Extract 12.1: A sample of a correct response to question 7

The candidates who scored from 7 to 11.5 marks showed inadequate mastery of the topic of Sustainable Mining especially on the negative impact of mining industry in developing countries. Some were able to describe negative impacts of mining industry in developing countries but failed to suggest ways of mitigating them. One candidate for example provided a relevant introduction, explained correct and incorrect negative impacts of mining industry such as *environmental degradation, eruption of diseases, results to soil erosion, mining industries and mining process*. The candidate also explained correct and incorrect ways of mitigation of negative impacts of mining industry such as; *the government should enact rules and laws, provision of education and formulation of good policies*.

The candidates who scored from 0 to 6.5 marks had little or lacked knowledge of the negative impacts of mining industry in developing countries. Some of the candidates who scored lower marks managed to give a relevant introduction about mining industry but failed to suggest ways of mitigating the negative impacts of mining industry in developing countries. One candidate for example mixed correct and incorrect impacts of mining industry such as;

soil erosion and land degradation, death of people, poor means of transport and communication and shortage of government support. This candidate mixed relevant and irrelevant ways of mitigating the negative impacts of mining industry such as; *provision of education, government support and provision of enough capital* and gave a weak conclusion. Another candidate explained factors which hinder development of industries such as; *insufficient capital, low level of science and technology and insufficient market* instead of the negative impacts of mining industry. Extract 12.2 shows a sample of such a poor response.

7.	<p>Mining industry; Mining industry contributes are industries which deals with extraction of mineral from the land. The following are the negative impact of mining industry in Developing countries.</p> <p>Land degradation; mining industries cause land degradation because during the mining process.</p> <p>Shortage of raw material; For example, may find that the availability of raw material in the industry was too low. So due to that it cause effect to those mining industry.</p> <p>Poor government support; Also poor government support contribute the effect in mining industries. - This was because may find that those government they didn't give that sector of mining industry capital or loan which can help to buy tools which were already destroyed so due to that it cause impact in mining sector.</p> <p>Poor technology; Also in developing countries like Tanzania there was the presence of poor technology compared to those developed countries like China. For example, on the side of power supply was not good compared to those developed countries like China so due to that it cause impact in mining sector.</p> <p>Poor transport and communication; Also poor transport and communication cause impact in mining industries this was because for example, if goods from production area failed to reach in mining industries due to poor infrastructure like road, railway and other so due to that it cause impact in mining sector.</p>
----	--

Extract 12.2: A sample of a poor response to question 7

In extract 12.2 the candidate explained one negative impact of mining industry, and also explained problems facing the mining sector such as poor transport and communication, poor technology and poor government support.

3.0 PERFORMANCE OF CANDIDATES IN EACH TOPIC

The analysis of candidates' performance in each topic shows that the candidates had good performance in 10 out of 13 topics. These topics are: *Water Masses* (95.8%), *Position Behaviour and Structure of the Earth* (96.3%), *Study of Soil* (84.8%), *Space Dynamics* (66.1%) in Geography Paper One. Other topics are: *Manufacturing Industry* (90.7%), *Population and Development* (66.5%), *Transport and Communication* (81.8%), *Sustainable Use of fuel and power* (68.6%), *Sustainable Mining* (96.2%) and *Environmental Friendly Tourism* (92.3%) in Geography Paper Two.

The performance of the candidates was average in the topic of *Topographical Map Interpretation* (54.2%) and unsatisfactory in the *Field Research Strategies* (34.5) and *Simple Survey and Map Making* (19.7%) topics as illustrated in Figure 14. In 2019 the topic of *Field Research Strategies* had good performance and *Simple Survey and Map Making* had weak performance.

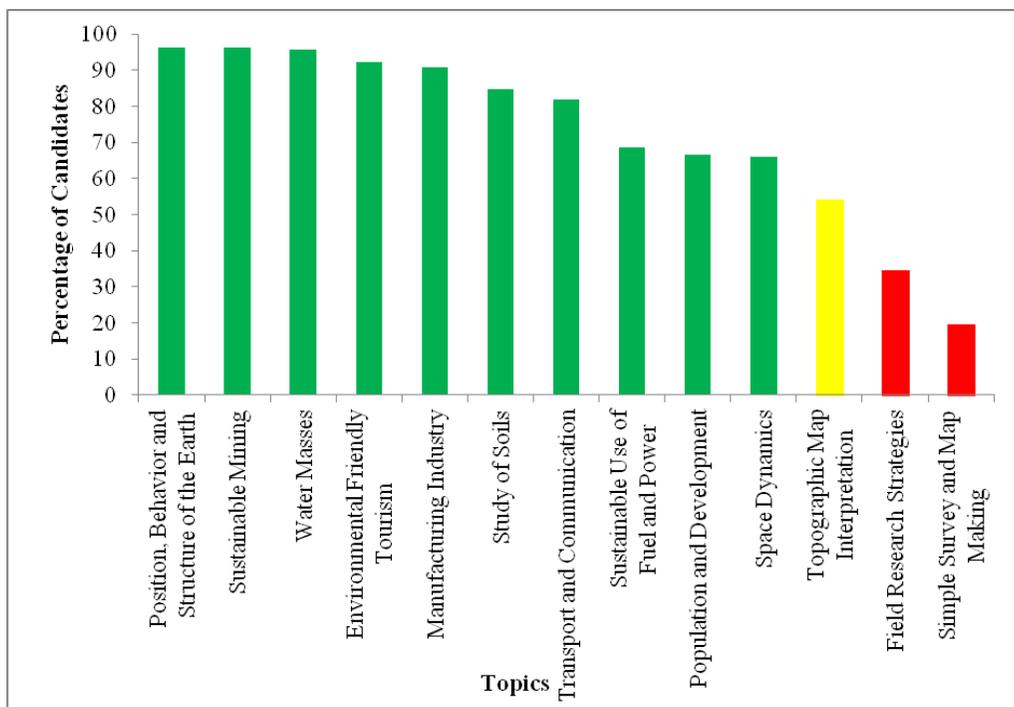


Figure 14: Performances of Candidates in each Topic

4.0 CONCLUSION

The performance of the candidates in Geography subject for Advanced Certificate of Secondary Education Examination (ACSEE) 2020 was good in most of the topics as it has been observed in the analysis question wise. The

analysis shows that the candidates' good performance was due to the ability of the candidates to understand the demands of the questions, candidates' knowledge and skills on the subject matter, candidates' competence in English Language and the candidates' skills in calculating and drawing. However, poor performance have been observed in two topics of Field Research Strategies and Simple Survey and Map Making. The observed reasons for that poor performance was failure to understand the demand of the questions and inadequate knowledge of the subject matter.

5.0 RECOMMENDATIONS

Based on the observations made from the Candidates' Items Response Analysis (CIRA) report, candidate's performance was good in 10 out of 13 examined topics. One topic had average performance and two topics of *Simple Survey and Map Making* and *Field Research Strategies* had weak performance. In order to improve the performance for prospective candidates in these topics the following are recommended:

- (a) Teachers should make sure that more effort is put in teaching the topic of *Simple Survey and Map Making* because performance in the topic is dropping yearly. This topic is to be taught through field practice in order for the candidates to understand the entire instruments used and the procedures of conducting different types of survey.
- (b) Teaching and learning processes in the classroom should be provided with practical activities. It is always expected that students learn better if the whole process is supported with concrete materials that give them the experience and direct knowledge. For example, in the topic of *Field Research Strategies*.
- (c) There should be an emphasis for students to learn the Geography subject more practically especially on the concept of map interpretation and survey so as to be able to attempt correctly the questions which require measurements. In Paper One question number 1(c), for example most of the candidates failed to measure forward and back bearing and to find the area of the given place in question 1 (a).

Comparison of Candidates' Performance by Topic in 2019 and 2020

S/N	Topic	2019			2020		
		Number of questions per topic	Percentage of Candidate who scored an average of 35 percent or more	Remarks	Number of questions per topic	Percentage of Candidate who scored an average of 35 percent or more	Remarks
1.	Position, Behaviour and Structure of the Earth	1	94.9	Good	1	96.3	Good
2.	Sustainable Mining				1	96.2	Good
3.	Water Masses	1	85	Good	1	95.8	Good
4.	Environmental Friendly Tourism	1	92.7	Good	1	92.3	Good
5.	Manufacturing Industries				1	90.7	Good
6.	Study of Soils	1	83.9	Good	1	84.8	Good
7.	Transport and Communication				1	81.8	Good
8.	Sustainable Use of Fuel and Power				1	68.6	Good
9.	Population and Development	3	80.4	Good	2	66.5	Good
10.	Space Dynamics	1	94.7	Good	1	66.1	Good
11.	Topographic Map Interpretation	1	88.5	Good	1	54.2	Average
12.	Field Research Strategies	1	77.2	Good	1	34.5	Weak
13.	Simple Survey and Map Making	1	27.3	Weak	1	19.7	Weak
14.	The Dynamic Earth and Its Consequences	1	95.1	Good			
15.	Agricultural Development	1	95	Good			
16.	Photograph Interpretation	1	94.5	Good			
17.	Sustainable Fishing	1	85.3	Good			

S/N	Topic	2019			2020		
		Number of questions per topic	Percentage of Candidate who scored an average of 35 percent or more	Remarks	Number of questions per topic	Percentage of Candidate who scored an average of 35 percent or more	Remarks
18.	Livestock Keeping and Management	1	80	Good			
19.	Sustainable Use of Forestry	1	26.1	Weak			

