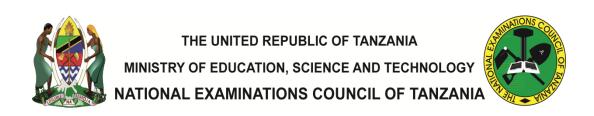


# CANDIDATES' ITEM RESPONSE ANALYSIS REPORT FOR DIPLOMA IN SECONDARY EDUCATION EXAMINATION (DSEE) 2022

**GEOGRAPHY** 



# CANDIDATES' ITEM RESPONSE ANALYSIS REPORT FOR DIPLOMA IN SECONDARY EDUCATION EXAMINATION (DSEE) 2022

**713 GEOGRAPHY** 

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The National Examinations Council of Tanzania is pleased to issue this report on Candidates' Item Response Analysis (CIRA) on the 2022 Diploma in Secondary Education Examination (DSEE) in Geography subject. The report aims to give feedback to different education stakeholders including: teacher trainees, tutors, parents, educational administrators, college administrators, policy makers and the general public on the performance of candidates in Geography subject. Also the report reveals the extent to which instructional goals and objectives were met.

The Diploma in Secondary Education Examination measures the effectiveness and efficiency of the education system in general and education delivery in particular. Basically the candidates' responses to the examination questions show how the teaching and learning objectives were achieved. It also shows the extent to which Geography subject learning competencies were attained in their Diploma in secondary Education course.

The report highlights some of the factors behind good performance of the candidates on the assessed topics. The factors included the ability to understand the requirements of the questions, adequate coverage and mastery of the contents of topics as stipulated in the syllabi, and good presentation skills. Candidates who scored lower marks lacked those elements. In this report, the analysis of each question has been done and different categories of information have been presented by figures and tables.

The National Examinations Council of Tanzania believes that, this report shall be a blueprint for enabling all stakeholders to identify appropriate measures to take in order to improve candidates' performance inuture examinations administered by the Council.

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

Athumani S Amasi

EXECUTIVE SECRETARY

#### 1.0 INTRODUCTION

This report presents the analysis of candidates' responses on the Geography examination for the Diploma in Secondary Education Examination (DSEE) 2022. The responses of the candidates to the examination items were analysed and hence determine the candidates' knowledge, attitude and skill in various Geographical phenomena. The examination adhered to the format which was reviewed in 2021 where The paper had two sections A and B. Section A consisted of ten (10) short answer questions composed from both Academic and Pedagogy syllabi. Section B consisted of four essay questions from both academic and pedagogy syllabi.

A total of 619 candidate sat for the Geography examination. The overall performance of candidates in Geography examination was good. The analysed data showed that 99.02 percent of the candidates passed the examination and 0.8 percent failed. In comparison with the 2021 examination, the performance in 2022 decreased by 0.08 percent from 100 percent in 2021 to 99.02 percent in 2022.

The report analysed the responses of candidates in each question by presenting the requirements of the questions and the percentage of candidates who responded correctly, averagely and poorly. The report further analyses reasons for such responses in each category. Extracts of the candidates' responses were used as illustrations to substantiate the analysed reasons. For the purpose of clarity, the performance of candidates is grouped into three categories of weak, average and good. The percentage interval for the three categories is 0-39, 40-69 and 70-100 respectively. To make easy distinction of the three categories of performances especially when tables and figures were used, green, yellow and red colours were used to represent good, average and poor performances respectively.

It is hoped that the findings of the analysis will help different stakeholder to improve the teaching and learning of Geography subject by addressing the issues related to learning which led to the candidates' failure to respond correctly or give insufficient responses.

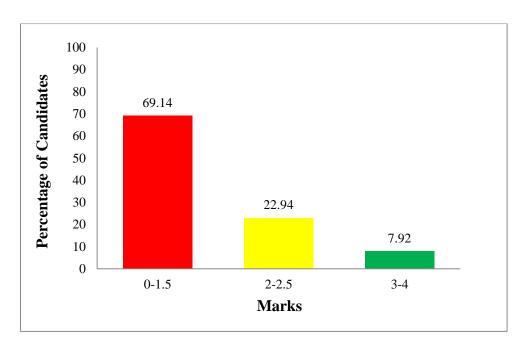
# 2.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE IN EACH QUESTION

#### 2.1 SECTION A: ACADEMIC AND PEDAGOGICAL CONTENTS

This section consisted of 10 short answer questions. Each question weighed 4 marks making a total of 40 marks. The candidates were required to answer all the questions. For the purpose of analysis, the performance was classified as good, average or weak depending on the scores the candidates were able to attain. The range of scores for the three categories of performance were 3-4, 2-2.5 and 0-1.5 respectively. The percentages of the candidates in each category were identified then the reasons for candidate to score marks range in each group were analysed. Since all the questions were compulsory, the percentages of candidates in each category of performance were worked out based on the 619 candidates who sat for the Geography examination.

## 2.1.1 Question 1: Geography Teaching and Learning Support Resources

The question had two part (a) and (b). The candidates were required to identify the teaching aids which can be used to teach students how to locate a position using longitude and latitude in part (a) while in part (b) they were required to explain how the teaching aids can be used in carrying out the lesson. The results showed that the performance of candidates in this question was generally weak. Many candidates (69.14%) provided insufficient responses and hence scored low marks (0-1.5) as compared to the candidate who provided sufficient responses which led to scoring good marks (3-4). Figure 1 presents a summary of candidates' performance for question 1.



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

The candidates' responses were further analysed to determine the reasons for the weak trend of performance in this question. The analysis showed that the 428 (69.14%) candidates whose scores were weak, lacked adequate knowledge of teaching and learning resources which are appropriate for teaching how to locate a position using longitudes and latitudes. The analysis of candidates' responses showed that, some candidates in this category were able to mention correctly one teaching aid but could not explain accurately how the mentioned aid can be used in teaching how to locate a position. Others mentioned inappropriate teaching aids hence were not awarded any marks. For example, one candidate mentioned *protractor* and *pair of string* but with inaccurate elaborations. Another candidate identified incorrectly *compass bearing and ruler* and *right angle instrument*. It was also noted that, some candidates in this category mentioned generally teaching aids without specifying, and therefore could not link properly with their application, (see Extract 1.1).

1	(a) if use sucho - Visual media, this welp
	to clasplayed on how to locates and
	18/ Real Objects.
	b) we Can displayed the pecture exploses og plutigruphy with voice and real -
	of photography with Voice and real -
	object on how to locate a position
	of using latitude and longitude.
	better I pick any me Students to
	demonstrates in the Classroom according
	to have beging and seen by the -
	pechare that here been chiplayed
	with the Ducke- visual image.

**Extract 1.1:** A sample of inappropriate responses to question 1.

As shown in extract 1.1, the candidate mentioned audio-visual and real objects without specifying the teaching aids. This led to general explanation of the teaching aids, contrary to the requirements of the question; to specify how the mentioned teaching aids can be used in teaching position.

The responses of the candidates with average performance were analysed to identify the reasons for moderate performance. It was found that, some of the candidates in this category were able to respond correctly in part (a) by mentioning correctly the teaching aids. However, they could not sufficiently explain how they are used in teaching students how to locate a position using longitude and latitudes in part (b). For example, one candidate mentioned correctly the *globe and map*, but could not explain how these teaching aids can be used in (b). Generally, in this category, most of the candidates were able to identify correctly the teaching aids in part (a) but were not able to explain sufficiently the application of the aids in teaching students how to locate a position in part (b).

On the other hand, the candidates who scored good marks (3-4) were able either to mention correctly all the two teaching aids and explain at least one application correctly. None of the candidates were able to explain fully all the points. For example, one candidate identified correctly atlas map and the globe as the teaching aids which are appropriate for teaching how to locate the position of a place. However, the candidate just explained what longitude and latitude are instead of showing how they are used in locating the position of a place. In answering this question, the candidate wrote,

"...the globe which show both latitude and longitude lines drawn from east to west its latitude and line drawn from north to south is longitude." Although this is the correct description of latitude and longitude, the question required the candidate to show how the teaching aids can be used in teaching students how to locate a position of a place. These weaknesses in the candidates' responses made them fail to score all the marks. The candidates were expected to show that a globe or a map can be used in locating a position of a larger part of a land mass, by using a rage of latitude and longitude in combination. e.g, Tanzania is located from latitude 2°N to 12°S and from 39°E to 45°E. in showing an exact position of an object on map, the intersection of latitude and longitude could be used. E.g. a particular object is found at (10°N, 28°W) Extract 1.2 in an example of fair answers by one of the candidates in this category.

	i/ Allas map (map of world).
Ø	i/ Globle - I will bring a globe to the clauron then
	pass through each group and showing which a line of longitude and line of letitude as who well as
	21/ Atlas - 1 will distribute an atlas of small groups in
	the classroom and then i will select one of the map found on in the atlass then i will guide
	how to read their degree in logating the

**Extract 1.2:** A sample of a fair response to question 1.

As shown in extract 1.2, the candidate identified the correct teaching aids. However, the focus of the candidate in using such aids was on showing the students the lines of latitude and longitude, instead of how those lines of latitude and longitude can be used to show position of place.

#### 2.1.2 Question 2: Weather and Climate

The question assessed the candidates' understanding of the equatorial climate. The candidates were required to show the uniqueness of the equatorial climate. They could achieve this having good understanding of different climatic conditions. This would enable them to explain the characteristics of the equatorial climate which makes it different from other climatic regions. The performance of candidates in this question was average. The performance of candidates varied slightly among the weak, average and good performers. The analysis showed that, 36.35 percent of the candidates had weak performance and an equal 36.35 percent had average performance while 27.30 percent had good performance. Figure 2 shows the percentages of the candidates in each category.

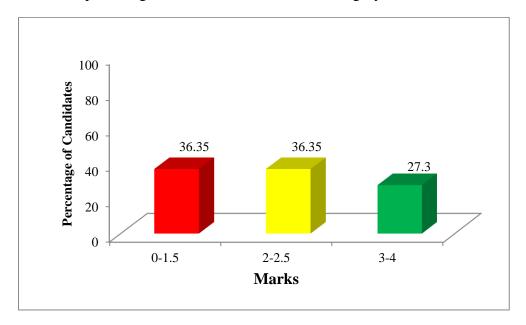


Figure 2: Candidates' Performance on Question 2

The analysis of responses of the 36.35 percent of the candidates who scored low marks revealed that, most of the candidates in this category had insufficient knowledge of different climatic conditions. Thus, they could not precisely identify the characteristics which are unique to the equatorial climate. Some of the candidates were able to explain correctly one climatic condition. Others were able to only mention but could not sufficiently explain the characteristics of the climatic conditions identified. For example, in response to this question one candidate wrote; *support plant growth*, *it supports life of both macro and micro-organisms*, *have high* 

rainfall and it had moderate temperature. In this response the candidate was correct only in the third point. It is true that one of the characteristics of equatorial climate is high rainfall throughout the year. Moreover, other candidates explained the characteristics of other climatic conditions such as semi desert and savannah climates while, others wrote the elements of climate such as wind, temperature humidity and cloud cover without explaining in details. Extract 2.1 shows a sample of poor responses.

2	
Q	If influence the development or growth of plant green floort
	green flant
( <del>1</del> U	18 Influence have Moderate rampill and
	1em prature
(119)	It experience with four Leasen Leich w Summer, wenter, autum and
	21
(IW)	It influence the development of plants fach
	US ONPS.

**Extract 2.1:** A sample of incorrect responses to question 2.

In extract 2.1 the candidate wrote generally what the equatorial climate can influence. However, the candidate was also not correct as he/she mentioned influences that can happen in any of the climatic conditions at varying degrees.

Further analysis of the candidates' responses showed that, the 36.35 percent of the candidate with average performance provided at least two correct characteristics of equatorial climate and either two incorrect responses. For example, one candidate presented four characteristics as follows; high rate of rainfall, the presence of big forests, low level of temperature and ...sometimes its cold by nature. While the first and second points were correct the third and fourth points do not represent characteristics of the equatorial climate. Another candidate wrote; equatorial climate receives high amount of rainfall, equatorial climate ...have dense forests, equatorial climate is covered by water bodies due to receiving high amount of rainfall and equatorial climate also has cold and warm conditions. In this response,

the candidate was correct only in the first two points while the last two points were incorrect. These kinds of responses made the candidate score 2 to 2.5 marks which is an average performance. Generally, these responses showed that, the candidates had insufficient knowledge particularly on the characteristics of equatorial climate.

On the other hand, the 27.30 percent of the candidates with good performance had adequate knowledge of the climatic conditions. Hence, they were able to explain correctly characteristics unique to the equatorial climate. These candidates presented characteristics such as high temperature throughout the year. Heavy rainfall throughout the year accompanied by lightning and thunderstorms, thick vegetation and forest which is canopy like structure and evergreen forests, high humidity throughout the year due to high temperature and extensive cloud cover. Such responses enabled the candidates to score 2.2 to 4 out of the 4 allocated marks. Extract 4 is a sample of a response from one of the candidates.

2	
ij.	Equational climate experience rainfall throughout the
	year with mean annual rainful ranging 1500mm and about
10.	Equational climate influence thick ferests with ever
	green plantations like conferous forests such a Amazon and
	Congo firests
<b>1</b> (1).	Equatorial climate experience high range of temperature
	ranging from P3°C and above
(ví	Equatorial climate is largely associated with the
- /	equation and almost coners the great near the equation
	may be 0°-5° south a North.

Extract 2.2: A sample of good responses to question 2.

In extract 2.2 the candidate was able to identify correctly all four characteristics of the equatorial climate although in his/her third point the word high range of temperature was incorrectly used because the equatorial climate has low temperature range. The candidate could not differentiate between high temperature and high temperature range.

#### 2.1.3 Question 3: Geomorphic Processes

The question required the candidates to examine the influence of tensional and compressional forces on the formation of a rift valley. In attempting this question the candidates were required to have knowledge of how this two forces act in causing the formation the rift valley by using the aid of diagrams. This question was also one of the difficult questions to most of the candidates as 78.35 percent had low performance (0 - 1.5 marks) and fewer (1.9%) had good performance (3.0 - 4.0 marks). The analysis showed that 19.71 of the candidates had an average performance (2.0 - 2.5 marks). Figure 3 Illustrates the performance of candidates in this question.

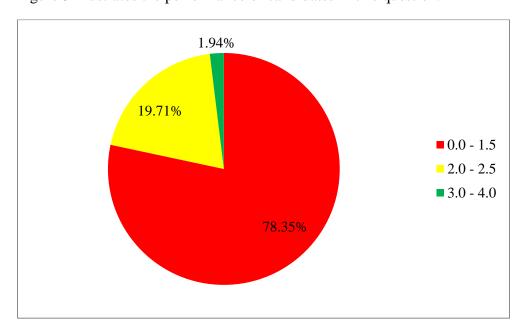
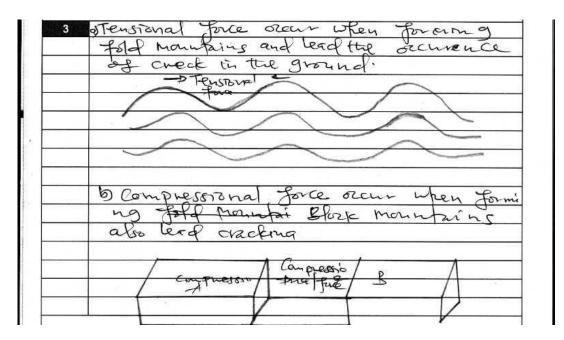


Figure 3: Candidates' Performance on Question 3

The review of the candidates' responses revealed that, the main reason for the candidates with weak performance (78.35%) was inadequate knowledge of how tensional and compressional forces act in the earth's crust. Due to inadequate knowledge, some of the candidates left the question unanswered, others presented incorrectly labelled diagrams. It was also found that, some candidates in this category presented diagrams accompanied with incorrect explanations. The explanation lacked the key feature such as the presence of a normal fault when tensional forces are in action and the presence of reverse faults when compressional forces are in action. Extract 3.1 is an example of weak responses from one of the candidates in this category.



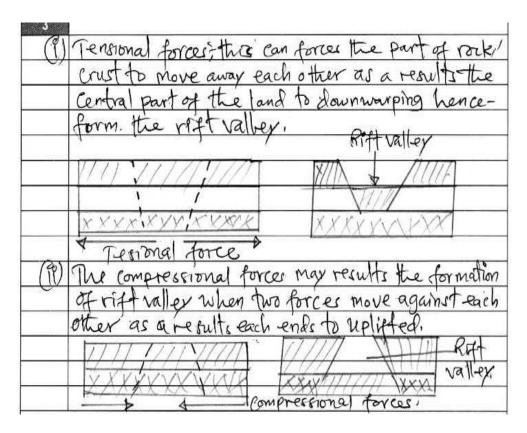
**Extract 3.1:** A sample of incorrect responses to question 3.

In extract 3.1 the candidate incorrectly explained the formation of fold mountains as a result of tensional forces contrary to the requirement of the question which required him/her to explain how these force contribute to the formation of a rift valley. Similarly, in (b) the candidate explained the feature (block mountain) which can result from compressional forces contrary to the requirement of the question.

The analysis of the candidates with average performance (17.71%) indicated that the candidates had partial understanding of how a rift valley occurs when either tensional forces or compressional forces are in action. The explanation of the candidates lacked one of the basic features which precedes the occurrence of the rift valley. For example, they could explain correctly how the tensional forces act in the earth's crust but could not explain the presence of parallel faults which make the central block to sink. Lack of such knowledge made the candidates fail to draw appropriate diagrams in explaining how compressional forces cause the occurrence of a lift valley. They could explain for example how compressional forces act but could not explain the presence of reverse faults and therefore there explanations were partially correct and hence their resulting diagrams.

The review of the responses of the 1.94 percent of the candidates with good performance showed that the candidates understood the requirement of the

question and also had sufficient knowledge. This was exemplified by the ability of such candidates to draw appropriate diagrams and relevant explanations despite a few errors in either their diagrams or narrations. Extract 3.2 shows an example of good responses.



**Extract 3.2:** A sample of good responses to question 3.

In extract 3.2 The candidate explained properly how the two forces play part in the formation of the rift valley despite a few grammatical errors.

# 2.1.4 Question 4: Human Occupations and Economic Development

In this question, the candidates were required to briefly analyse the detrimental impacts due to the presence of the mining industry. The performance of candidates in this question was weak. Majority of the candidates (65.11%) performed poorly by scoring 0 to 1.5 marks. Only 6.14 percent of the candidates had a good performance. The remaining 28.76 percent had an average performance. Figure 4 illustrates the performance of candidates in question 4.

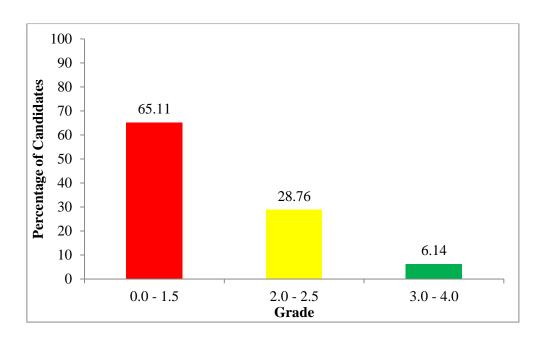


Figure 4: Candidates' Performance for Question 4

The responses of the candidates were analysed to determine the reasons for the weak performance. The analysis showed that, most of the candidates in this category of performance had good points but failed to justify them to suit the requirement of the question. They wrote short phrases which required them to elaborate further to make them clearer. Extract 4.1 is a sample of weak response in this category.

4	D The mining industry Support the development of other Sector like agricultural and health Sector
	iil It is the Source of townson attraction, due to
	Same of minerals that extracted in the
	iii) It Support the provition of Infrastructures within the Country.
	ig) It is the source of the national encome, this is because of inhance the development
	of the Country,

**Extract 4.1:** A sample of poor responses to question 4.

In the extract 4.1, the candidate provided general statements which can be applied to all sectors of the economy. For example, when the candidate says that mining develops other sectors it may be implied that it contributes income to the nation which then is used to develop other sector. However, this remained silent in the candidate's response. The same applies to other points which the candidate argued.

The candidates with average performance managed to analyse clearly at least two out of the four given points. This enabled them to score at least 2 marks out of the four allocated. Other presented inaccurate responses which lead to loss of marks. For example, in responding to this question, one candidate wrote; (i) Leads to soil erosion, (ii) Leads to emergence of drought due to influence of cutting down trees (iii) leads to death of people when there is disintegration of rocks (iv) leads to emergence of earth quakes. In his/her responses the candidate was partially correct in the second point and correct in the third point. However, the fourth response was incorrect as earthquakes occur due to collision of two tectonic plates and not as a result of mining. Soil erosion also needed justification because during mining precautions are taken to control soil erosion. The candidate was correct about mining as a course of deaths which happens especially when mining areas collapses while miners are inside the mines.

On the contrary, the 6.14 percent of the candidates who scored good marks were able to analyse the detrimental effects of mining. The candidates were able clearly to give points such as land degradation, soil pollution, water pollution and deforestation which are problems in most mining areas and the minerals being exhausted the land left bare. Deaths, caused by collapsing of mines holes or walls. conflicts where the low paid workers fights with their employers. Ownerships of the mining provinces lead to fighting in mining centres. Mining causing the decline of other economic sectors such as agriculture due to over concentration on one sector. Such points led the candidates to score 3 to 4 marks out of the 4 allocated. Extract 4.2 is a sample of good responses from one of the candidates.

4	- Environmental polletion, prexample airpo
	Mution, leater pollution due to the process of est
	ration of Minerals from 10 ground.
	- Reducati Deforestation, also people do
	cut down tree so as to establish mining activiti
	es prexample in Geita where the gold extract
	their there
	- It influences the population pressure at
	a particular area where mining activities take
	s place forexample in Gelta litera high population
	n pressure hence leads to the spread of draws.
	- Reduction of grable land for for agricult
1.87	use, The fertile land can be used as source
	of Mining activities hence lead to the provent
	ation of agriculture activities.

Extract 4.2: A sample of good responses to question 4.

In extract 7, the candidate gave responses which were relevant to the question he/she was able to analyse why the given point had negative impact.

# 2.1.5 Question 5: Geography Discipline

In this question, the candidates were required to show how Chemistry, Agriculture, Demography and Biology relate to Geography. This question proved difficult to most candidates. The data showed that, 89.8 percent of the candidates had weak performance (0 - 1.5 marks). The data further showed that, only 1.5 percent of the candidates had good performance of 3 to 3.5 marks out of the 4 allocated. Thus, in comparison with other items of the examination, the performance in this question was the weakest. Table 1 shows the performance of candidates in question 5.

Table 1: Candidates' Performance on Question 5

SN	Range of scores	Total No of candidates	Percentage of candidates (%)
1	1-1.5	556	89.82
2	2 -2.5	54	8.72
3	3 - 4	9	1.46

Sample of candidates' responses were reviewed to determine the reason for the weak performance in each score range. It was generally found that, the candidates struggled to establish the relationship of the mentioned discipline with Geography. The common obstacle to the candidates was their attempt to merely define each of the discipline without showing how they relate with Geography. It was expected that the candidate would make connection between Agriculture and Geography by relating Geography in studying farming systems, distribution of those farming systems and the use of geographical techniques in forecasting weather which is useful for agriculture. In relating geography to Demography, the candidates were expected to identify the fact that, demography is a sub branch of Geography dealing with population studies. Thus, the study of Geography helps in dealing with demographic studies. In addition, Geography deal with the study of population and its relationship to settlement and the factors for its distribution. The candidates were expected to relate Geography and Chemistry that the knowledge of chemistry is used to determine soil composition and studying different mineral occurrences. Finally, the candidates were expected to relate Geography with Biology by establishing the fact that, the knowledge of Biology helps Geographers to determine different types of flora and fauna and then use geography as a means to determine their distribution and reasons for such distribution.

It was noted however that, the candidates with weak performance (89.82%) failed to establish such link and ended up giving awkward explanations. Others relate the given disciplines in terms of the topics they share. For example, one candidate wrote: "...in geography, there is a topic of rocks which is found in chemistry so this leads to be related." In explaining the relationship between geography and agriculture, another candidate wrote: "...in geography also there were the topic of agriculture actually relate with agriculture." In relating Demography with Geography, another candidate wrote: "...we learn about time and organisms of topography also in geography we learn in rocks disintegration and nature of rocks." This kind of response indicated that the candidate lacked knowledge of what demography deals with. However, it is important to note that, although the candidates tried to link the disciplines in terms of common topics they have, the relations were too superficial leading to scoring low marks. Extract 5.1 shows a sample of incorrect responses from one of the candidates.

5	Chemistry Subject have organize soil
	to pic and Geography have the same soil top a which are sharing the same content du
	no teaching and learning process
	the same topic of Geography both home agric
	There topic with similar Contents.
	Simplified - earth suface the same of with
	Geography has the topic structure of earth
	Biology has the topic Plants and anima
- V	as the same with Geograph dealing with pla and animals of a particular location.
	and animals of a particular location.

**Extract 5.1:** A sample of incorrect responses to question 5.

The responses of the candidates with average performance (8.72%) were also analysed. It was found that, the candidates in this category were able to establish at least two of the disciplines beyond common topics studied among the subjects. For Example, in explaining the relationship between Geography and Chemistry, one candidate wrote: chemistry relate to Geography as the study of soil conservation as both chemistry and geography teach ways of soil conservation. Another candidate related Geography with Demography by arguing that, Demography as the study of human population is leant in Geography, we learn how to ensure utilization of sustainable use of resources for the development of the people. The average score resulted from lack of conciseness in some of the candidates' responses as they ended up presenting the topic the disciplines in question share.

On the other hand, 1.46 percent of candidates with good scores were able to provide at least three well-argued answers to substantiate the relationship between the said disciplines with Geography. The candidates were able to describe the relationship beyond mere similarities of the topic they share. Extract 5.2 Shows a sample of good responses from one of the candidates.

	chemistry: It involve the decomposition and composition of element and also in geograph mirrium the decomposition of element to form soit.  Agriculture: The geograph hence the study of soit and climate help the agriculture in determine the kind of enops to grow marelan climate:
ţh)	Agriculture: Its geograph here the study of soil and climate help the agriculture in determine the
	climate help the agriculture in determine the
	kind of enops to grow materian elimate.
<u> <u> <u> <u> <u> <u> <u> <u> <u> <u></u></u></u></u></u></u></u></u></u></u>	Demography: study of population: due to the didy of population lops in geography help is given no the skell on demography study.
	of population lopi in geography help is given
	ng the skell on demography study.
40>	Biology: study of hims organin: due to study of numericant the geography owner the suitable over for the sudan of hims organism.
	invironment the geography gives the suitable over
	for the sudan of time organism.

**Extract 5.2:** A sample of good responses to question 5.

In Extract 5.2 although the candidate was able to establish loosely the relationship between Chemistry and Geography, the candidate was able to establish fairly well in showing how Agriculture, Demography and Biology relate to Geography.

# 2.1.6 Question 6: Principles of Teaching and Learning Geography

The question had two parts. In part (a), the candidates were required to explain what spatial ability is and in part (b) they were required to identify three functions of spatial thinking. The performance of candidates in this question was average. The data showed that, 49.27 percent of the candidates had average performance of 2 to 2.5 marks. It was however noted that, the percentage of candidates with weak performance was more (37.00%) than that of candidates with good performance (13.73%). Figure 5 shows the performance of candidates in each category.

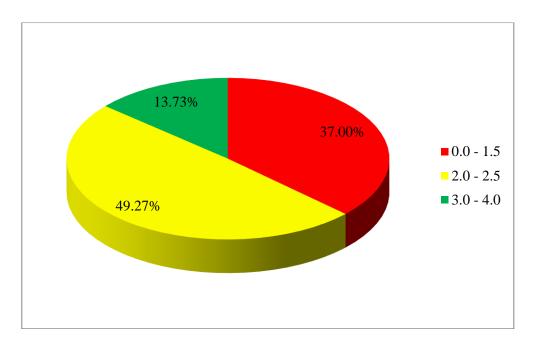


Figure 5: Candidates' Performances on Question 6

Responses on candidates' scripts were reviewed to determine the reasons for this performance. The results showed that, the candidates with average performance had some weaknesses in their responses. Some were able to explain what spatial ability is but could not sufficiently explain its functions. Others were able to explain what spatial ability is but gave outlines of the functions without clear elaborations. It was generally noted that many candidates lacked knowledge and therefore could not respond to the question as expected. Some of the candidates left the question unanswered.

The review of candidates' responses with weak performance revealed that the candidate had insufficient knowledge about spatial abilities. This was exemplified by the responses which attempted to define spatial ability incorrectly. For example, one candidate explained the use of spatial ability as used in many field of study such as collecting data in different fields in part (a) instead of explaining what spatial ability is. Another candidate explained spatial ability unclearly as ...the ability which helps to concern with the concept of spaces for example mathematical space, physical space. Another candidate simply defined spatial ability as ...the ability of having space ability. Responses like these led to obtaining low or no mark to such candidates. Extract 6.1 shows a sample of incorrect responses from one of the candidates in this category.

6	As Spatial ability is the ability to clotermine or to understand some concepts
	to understand some concepts
	Is the ability to Understand something not as whole while some extent.
	as whole while some extent.
	B)(is Spakial thinking helps to build understanding of pew content.
	(i) It used to select needed anatorial in the Mind.
1.0	(iii) It help used to make choice Forwhat we plan
	ning.

**Extract 6.1:** A sample of incorrect response to question 6.

Further review of candidate's responses revealed that, the 13.73 percent of candidates with good performance had adequate knowledge of spatial abilities. The candidates were able to explain what spatial ability is in part (a) and elaborate its functions in part (b). the candidates were able to explain spatial ability as the capacity to understand and remember the spatial relations among objects. Spatial ability is not a monolithic and static trait, but made up of numerous sub skills, which are interrelated among each other and develop throughout your life. The candidates were also able to elaborate the three factions of spatial abilities which implied the descriptive function, the analytic function and the inferential function. Extract 6.2 is a sample of good responses from one of the candidates in this category.

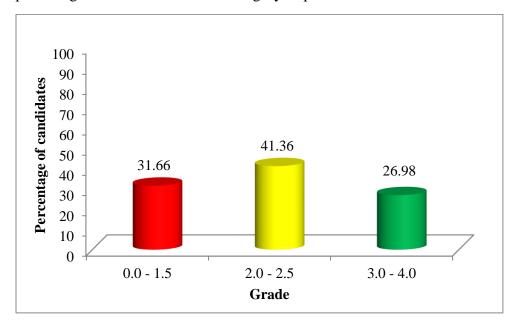
6	)
	patial ability, 111
Ross	ex to the ability of an-individual to determine
	tion, location, space, time, and grangement of
11.1	vent phenomena on the earth's rurgace.
11	
Dhi	notion of spatial, thinking,
-H 1	relar to arrange different features on the earth's
out	ace.
-(+)	helps to create awareness on different phenomen
a	on the earth's surface 1!
-1+	helps to whow tocation and position of
bAf	man made and natural features on the
90	offis ourface.

**Extract 6.2:** A sample of good responses to question 6.

In extract ... the candidate was successful in explaining what spatial ability is in part (a) and was able to elaborate three functions although the use of some phrases such as '...arrange different features' in his/her first function were not correctly used. However, the overall presentation was good.

# 2.1.7 Question 7: Geography Teaching and Learning Support Resources

This question required the candidates to elaborate the relevance of the print media, audio-visual media, models and real objects in teaching Geography. The data showed that, more candidates (41.36%) had average performance and fewer (26.98%) had good performance. The data further showed that 31.66 had a weak performance of 0 to 1.5 marks. The general performance in this question was average as 68.34 percent of the candidates were able to score 50 percent or above of the allocated marks. Figure 6 shows the percentage of candidates in each category of performance.



**Figure 6:** Candidates Performance on Question 7

The responses of candidates were further analysed in each category. The analysis showed that, the candidates with average performance had several weaknesses in their responses which made them to score averagely. Some of the candidates in this category gave general relevance which are common to all types of media for example, one candidates wrote; the print media help in teaching and learning process, audio-visual media helps the students to be interested in the subject matter. With such responses, the candidates were not able to score all the allocated marks because these

applies to all the teaching and learning resources. The candidates were supposed to give the relevance which is unique to each type of media. Further analysis indicated that most of the candidates in this category defined the four media but could not explain their relevance. For example, one candidate wrote; *Print media uses hard copy such as books, magazine and journals, audio-visual media uses sound and visualization such as television, models are objects which represent real object e.g the globe which represent the shape of the earth, real object are the true objects used in teaching and learning such as mountains.* These kind of responses did not address the requirement of the question fully. Apart from explaining what they are, the candidates were required to briefly explain their relevance in teaching and learning.

The analysis of the responses of the candidate with good performance showed that these candidates were able to explain the relevance of each of the teaching media by pointing out the relevance which is unique to each category of media such as, *Print Media being the chief media of information exchange whereby learner can be assigned to read to understand a particular concept.* And the power of ...the audio-visual media in bringing abstract concepts into visual form which aid understanding. The candidates also explained the relevance of models ...as direct representation of real objects which make transmission of knowledge more direct. In addition, the candidates were also able to describe the relevance of ...real object as the representation of reality itself and therefore learners get firsthand information directly from the environment. Extract 7.1 is a sample of good responses from one of the candidates.

7	a) Print media Is the media which are inform
	or written do document example are textbook,
	purnals and magazine.
	3"
	ij Audio visual, this are teaching materials which
	are using in teaching by listening and observing
	example films, videos
- 40	in Models thus are teaching aids used in teaching
	and caputure attention of the learners example
	of model is globe
	iv/ Real objects, Are real things which used in
	teaching process where teacher used roal things
	in order to make the lesson more understanding
	example of real object is soil

**Extract 7.1:** A sample of good responses to question 7.

On the other hand, the candidates with weak performance were not able to adhere to the requirement of the question. It was generally found that, the candidates in this category had insufficient knowledge of the different types of media. Thus, they could not provide answers which showed the relevance of the media in the teaching and learning process. Some of the candidates in this category left the question unanswered, which is an indication that they lacked the knowledge to use to respond to it. Others had grammatical errors in their responses which made it difficult to understand what they meant. Extract 7.2 is a sample of an incorrect responses from one of the candidates.

7	Dimply fraing the process of teaching and bearing
	( Audio virue) - this involve thereing both and count and impose which he was to so might the
	Possery Learning  O Malde - the convert to these the sensel appearance of a adject
	el Real object - this closent reque more to agure

**Extract 7.2**: A sample of incorrect responses to question 7.

# 2.1.8 Question 8: Map Reading and Photograph Interpretation

This question used a scenario of Mwanshamba who saw her photograph which was taken when she was two years old. The candidate was then required to briefly explain the strengths of that type of photograph. In responding to this question, the candidate was expected to understand first the type of photograph and then explain the strengths of such type of photographs. The type of photographs taken for family use are usually ground photographs. Thus, the candidates were required to explain the strengths of ground photographs.

The data indicated that, this question was difficult to most of the candidates. It was found that more candidates (84.81%) had weak performance of 0 to 1.5 marks, 14.70 percent had average performance of 2 to 2.5 marks and only 0.49 percent had good performance. Table 2 summarises the performance of candidates in this question.

Table 2 A summary of Candidates' Performance on Question 8

SN	Range of scores	Total No of candidates	Percentage of candidates (%)
1	1-1.5	525	84.81
2	2 -2.5	91	14.70
3	3 - 4	3	0.49

The responses of candidates were analysed to determine the reason for the weak performance. The results showed that most of the candidates in this category attempted to describe the characteristics of the photographs rather than describing their strengths. For example, one of the candidates in this category wrote; is shows things clearly, it shows the fore, middle and background, it always concerns with one object, it shows the land. Another candidate gave similar responses by writing that, the types of photograph ...are taken on the ground level, they show front view of the object, they show three parts fore, middle and background, they shown front objects are seen more compared to the back parts on the photograph. Although these were correct characteristics of ground photographs, they were however not the focus of the question. The question required the candidate to explain the strengths of the said type of photographs.

The candidate were expected to explain the strengths of ground photographs such as it is easy to interpret the image of objects observed on the photograph, they are less expensive to produce compared to other type of photographs, they are most familiar photographs compared to other forms, they can be used as an aid to field sketching and they give more easily data of the areas. The focus of candidate to the characteristics rather than the strengths made them score low or no marks. Extract 14 shows a sample of incorrect responses from one of the candidates.

•	(2) It covers a large area when it to takes.
	(it) It show the hortzon clearly
	(iii) It is taken when a cameraman is on the grown
	(EV) It is taken horizontally around an diject.

Extract 8.1: A sample of incorrect responses to question 8.

Further review of the candidates' responses showed that, the major weaknesses in the responses of the candidates with average performance (14.70%) were mixing some characteristics with some of the strengths were however not clearly stated but implied. For example, in responding to this question, one candidate wrote; (i) it shows all the features that are found on the photograph (ii) it is cheap can be used anywhere (iii) it is easy to interpret the features that are found on the photograph (iv) shows fore middle and background. In this response the candidate treated point (i) and (iv) as strengths although they are basically features of ground photographs.

The analysis revealed very few candidates who were able to score at most 3 marks in this question. The challenge of candidates mixing features of ground photographs and their strengths was persistent even to this category of candidate. However, the difference was that, these candidates were able to explain at least three strengths even if it was not very clearly. Extract 8.2 presents a sample of good responses from one the candidates in this category.

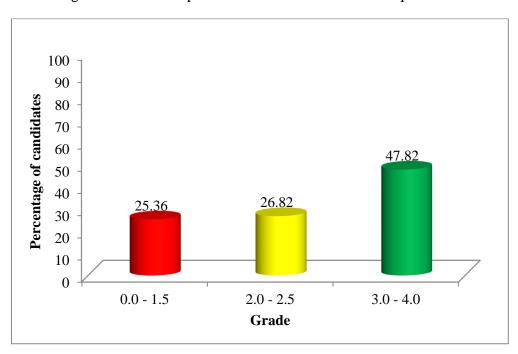
8 (is It is low cost to take than other types
of photography like Aerial photography.  (ii) It is easily to interpret and read it  since it show real object on large
(ii) It is easily to interpret and read it
since it show real object on large
Sice
Ci'i) It can be used by geographical researcher, Forexample field study.
Civs It may show other necessary geographial
foatures noar the object, middle or
back ground features.

Extract 8.2: A sample of good responses to question 8.

In extract 8.2 the candidate tried fairly well to present the strengths of ground photograph. The candidate was able to avoid the pitfall of presenting the features of ground photographs as most of the candidates did.

## 2.1.9 Question 9: Human Occupation and Economic Development

The question was made up of scenario of a TANAPA manager who warned that not everything brought by tourist should be accepted. The candidates were required to support this statement by giving four points. The data showed that, the performance of candidates in this question was good as 42.82 percent of the candidates had good performance of 3 to 4 marks. The data further revealed that 36.82 percent had average performance of 2.0 to 2.5 marks and 25.36 percent had a weak performance by scoring 0 to 1.5 marks. Figure 7. shows the performance of candidate is this question.



**Figure 7:** Candidates' Performance on Question 9

The candidates with good performance (42.82%) were able to support the warning of the TANAPA manager by explaining the tourist influences which should not be accepted. The candidates were able to explain issues such as negative cultural influences such as improper dress codes and other behaviours which are deemed unacceptable in our societies, health risks such risk of diseases such as HIV/AIDS which may result from unprotected sexual relations and the danger of environmental pollution which may

result from improper management of wastes brought by tourist. For example, one of the candidates wrote about the things which they should be not accepted; avoid behaviours and issue which, (i) may result to destruction of indigenous culture (ii)may result to spread of diseases such as CORONA and HIV/AIDS (iii) may lead to environmental pollution by dropping waste materials to the environment (iv) lead to terrorist actions. These kinds of responses indicated that the candidates were not only knowledgeable but also understood the requirement of the question. It was however observed that although the candidates had the required points, most of them could not relate to the stem of the question. They provided the effects rather than stating what behaviours that should not be accepted from tourists so that the mentioned effects would not occur. Extract 9.1 is a sample of good responses from one of the candidates.

9 y Load to de	struction of aulture, the coming of
tourist in a	country make most of the countries
the culture t	obe destroyed.
il/ Spread of	disease such as HIV/AIDS, also the
presence of	tourist in a artain wuntry cause the
spread of o	liferent disease
i i i i i i i i i i i i i i i i i i i	XV.
iii Leads to en	vironment pollution also presence of tourist
cause the	environment to be polluted because they
coming wit	h their things and pour to the environce
ntal at the	end bring the durty to invironment.
	5
ivi/ Load to te	errorism, some tourists doming to the
accenting tor	the aim of making territory such as
tor animal b	y poaching animal,

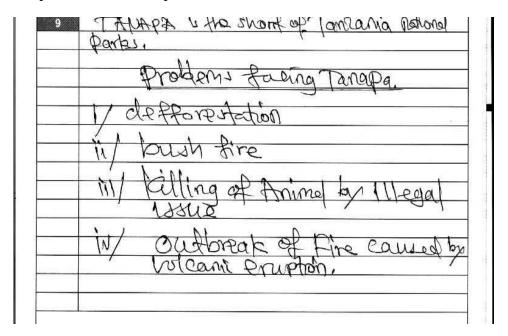
**Extract 9.1:** A sample of good responses to question 9.

In extract 9.1 the candidate explained valid points which may be a result of tourists coming to our country. However, the candidate was required to explain what not to accept from tourists so that such effects do not happen. Thus, the candidates with such responses could not score all the allocated marks.

On the other hand, the candidates with average performance (26.82%) had partial knowledge of the subject matter. The candidate in this category gave a mixture of correct and incorrect responses which led to average scores.

Other simply outlined some points without further elaborations on why they should be avoided.

The analysis on the candidates' responses with weak performance showed that, the candidates in this category misinterpreted that question and therefore gave responses which did not address the requirement of the question. For example, in responding to this question, one candidate wrote; (i) to maintain peace and security, (ii) to increase government revenue (iii) to educate people to brought goods (iv) increase national parks. From such responses, it was difficult to understand what the candidates intended to address. Another candidate wrote responses which were not connected to the stem of the question which made it difficult to understand the points he/she was advancing. In his/her responses he/she wrote: (i) because it can lead to dependency of the people (ii) can slow down our development (iii) can lead laziness to the people (iv) accepting of their traditions like wearing style. The candidate seems to have been pointing out the negative impact of tourism. However, the question required him/her to identify the negative influences brought by tourists which should not be accepted. Extract 9.2 is a sample of incorrect responses from one of the candidates.



**Extract 9.2:** A sample of incorrect responses to question 9.

In extract 9.2, the candidate misunderstood the question and presented the problems which TANAPA faces instead of the negative influences which should not be accepted by the people.

## 2.1.10 Question 10: Energy Resources

In this question candidates were required to distinguish the concepts renewable resources, non-renewable resources, firewood and biomass. The date showed that, the candidates' performance was good since 72.22 percent of the candidates were able to score 50 percent or more of the allocated marks in this question. The data showed that, 42.17 percent of the candidate had good performance of 3 to 4 marks. The data also showed that 30.05 percent of the candidates had average performance of 2 to 2.5 marks and the remaining 25.00 percent had weak performance of 0 to 1.5 percent as illustrated in Figure 8.

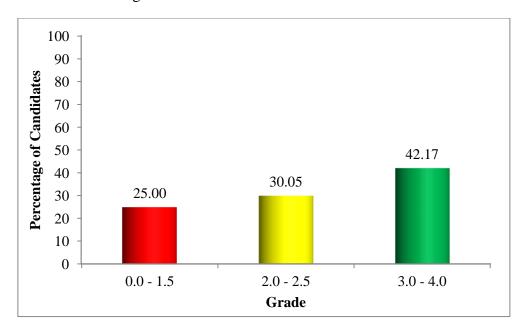


Figure 8: Candidates' Performance on Question 10

The analysis of the responses of the 42.17 percent of the candidates with good performance showed that, the candidates were able to distinguish the four concepts sufficiently. For example, in responding to this question one of the candidates responded by writing; (i) Renewable resources are those resources which can be used again after been used such as solar energy, biogas, wind and hydroelectric power. (ii) Non-renewable resources are those resources which can be exhausted after use such as firewood. (iii) Firewood is the non-renewable resource which cannot be replaced again when used. (iv) biomass is the energy resource formed thought faeces of animals to generate energy. The responses of candidates in this category showed that the candidates had adequate knowledge about different types of

energy resources. Extract 10.1 shows a sample of good responses from one of the candidates.

10	
	Renewable resources - refer to all energy sources which
	does not pollute our environment and can be recycled
	does not pollute our environment and can be recycled like Hydro- Electric power, Wind energy and gas.
	Non-renewable sources - are energy sources when used
	does not renewal again and it harm to Environment
	does not renewal again and it harm to Environment like Oil energy, cherzoal, coal, fire wood.
	Fire wood- Is to kind a non-nenewable energy which
	Fire wood-1s to kind g non-nenewable energy which extracted from the foreof Lad rued in domestic.
	Biomess - 12 a kind of renewable energy resources which
	extracted from the decomposition & unimels and plants remain

**Extract 10.1:** a sample of good responses to question 10.

The analysis of the responses of candidates with average performance (30.05%) was done to determine the reasons for such performance. The results showed that, the main reason for average performance was inadequate knowledge in some of the assessed concepts. The candidates were able to provide either two of the concepts correctly and the other two were not clearly explained.

The analysis of candidates' responses with weak performance (25.00%) showed that, the candidates in this category, had insufficient knowledge of the assessed concepts. Some of the candidate did not understand what they were supposed to do in responding to the question. This was exemplified by responses which did not match the requirement of the question. For example, in responding to this question, one candidate wrote phrases such as (i) it can cause destruction of water, (ii) it causes chronic diseases (iii) it can lead to destruction of environment (iv) it can lead to increase in terrorism. These kind of responses implied that the candidates did not understand the requirement of the question. It was also noted that, some of the candidates did not have a clear distinction of the concepts and hence failed to differentiate them or failed to elaborate them as shown in extract 10.2.

10	
ij	Renewable resources; Mrs are energy resources which
	are create mir pollution during creation or justoday
ñ	Man-renewable resources: Mis are energy resource whose
	are not create on pellution during creation
	Mon-renewable resources: his are energy resource whole are not create any pellution during creation or into buced for example gesthermal energy.
ñì	firewood: his an energy resource which are weate
	an'r pollution during producing energy.
ţ,	Biomass: This are energ resorgee which are not
	crewle air pollution during producing energe

**Extract 10.2** a sample of incorrect responses to question 10.

In extract 10.2, apart from grammatical errors in the candidates' responses, the concepts assessed also were incorrectly presented. The candidate was incorrect in writing that *renewable resources.... create air pollution during producing energy* in point (i). similarly, the candidate was incorrect in pointing out that non-renewable resources do not create energy resource because these types of resource produce energy while producing gases that pollute the environment. The candidate also loosely described firewood as resources which create pollution during production of energy but without pointing out what they are. Such responses were a source of weak performance in this question.

#### 2.2 SECTION B: ACADEMIC AND PEDAGOGICAL CONTENT

This section comprised of four essay questions set from both academic and pedagogy content topics. The candidates were required to answer all the questions. Each question weighed 15 marks making a total of 60 marks in this section. The performance of candidates in this section were classified as poor, average and good. The marks range for each class were 0 - 5.5, 6.0 - 10 and 10.5 - 15 respectively. In the subsequent section, the analysis of each question was done by identifying the requirement of the question then samples of candidates' responses were analysed to identify the reasons which led candidates to attain particular range of scores.

## 2.2.1 Question 11: Population and Development

This essay question assessed the candidates understanding about population policy. In particular, the candidates were required to show the positive impacts of population policy in Tanzania. This was one of the well attempted questions. The data showed that, 58.64 percent of the candidate scored good marks (10.5 and above) and 40.23 percent had an average performance of 6.0 to 10 marks. Only 1.13 percent of the candidates had poor performance of 0.0 to 5.5 marks as shown in **Figure** 9.

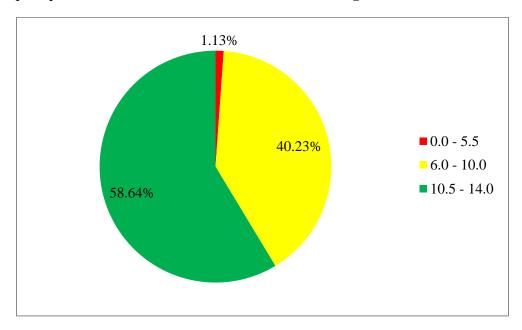


Figure 9: Candidates' Performance on Question 11

The analysis of candidates' responses with good scores showed that, the candidates were able to respond to the question in accordance with the requirements of the question. The candidates were able to explain the positive impacts of population policy such as raising awareness of population issues particularly those related to reproductive health, Expansion and /or introduction of population studies in institutions of higher which have led to increase in experts about population issues and the increase of the number of NGO dealing with population issues.

The analysis of candidates' responses in this category revealed further that, although the candidates had adequate knowledge on population issues, they lacked strong writing skills. Their responses lacked coherence. The facts were presented without linking them to the question in a logical manner. Despite this problem, there were good number of candidates with good

organization and were able to link their arguments with the question sufficiently. Extract 11.1 is a sample of good responses from one of the candidates.

. 11	Population policy: Repent to statement, Laws,
	and regulation stated and analysed by government
	so as to central population and rise up the Living
	I tandard of people in a country, there are two
	Type of population policy, explicity and implicity po
	licy. The tollowing are the positive Impact of popul
	lation policy in Tanzania.  To It rise The Living standard of People, The
	to It rise The Living standard of People, The
	government set the policy of controlling population
	Though family planning so as to enable majority
	to have ability to handle their family and engage in
	investiment rather than producing for substance.
	It result to sustainable use of natural
*	resources; Government establish Laws which guir
	de People Use natural resources in a good way
	SO as to meet the need of present generation and
	fecture generation.
	It result to equal distribution of resources;
	The government policy toward population is to make
	ourse that equal allocation of social services
	depending on the total population of a particu
	lar place.
	it Maintain and promote gender equality:
	The government set the policy toward population
	that both Mens and Womens has egual chance
	in different aspect, in social economic and
	Political Matter thus why now days There is policy of women empowerment policy is orde
	Policy of Women empowerment policy in orde
	i la stimulate development
	re development easily and smoothly the policy into
	re development easily and smoothly the policy into
11 Cont.	duced toward population should be well imple
	mented and Those who tail to implement should
	be strictly punished.
_	

**Extract 11.1:** A sample of good responses to question 11.

In extract 11.1, despite some grammatical error, the candidate tried well to present his/her points in an organized manner. The candidate introduced well his/her topic and argued through to his/her conclusion.

Further analysis indicated that, the main reason for the 40.23 percent of candidates with average performance was superficial knowledge of the positive impacts of the population policy. Many of the candidates explained different aspect of economic and social development which can be realised if the population increases proportional to availability of resource such as adequate provision by the government of social services such as provision of education, provision of health services and sufficient distribution of water resources. These however are not the positive impacts of the population policy by itself but are the benefits which may be realized if the population policy is successful. Such linkage lead to partially correct responses which led such candidates to have average performance.

The analysis of the responses of the 1.13 percent of candidates with weak performance showed that, their main drawback was misinterpretation of the question. Instead of explaining the positive impacts which the population policy has been able to realize so far, the candidates explained generally the benefit of controlled population. This was implied in their responses as most of the them linked population policy with economic growth and better provision of social services. The focus of the question was however the positive impacts which the population policy of Tanzania has achieved so far. For example, one candidates in responding to this question wrote in one of his/her responses that, population policy ...enables people to preserve their culture. Population policy is the source of people to preserve their culture. Another candidate responded that ...population policy is the source of population growth. These kind of responses indicated the potentials of population policy though not necessarily correct instead of focusing on the impact of the population policy which can be identified so far. Extract 11.2 in a sample of weak responses from one of the candidate.

11	Population policy refer to the law tettled
	by the government and regulation to be followed
	and used by the people. The following are the
	positive impact of population policy in Tanzania
	as following:
	People can preserve and maintain their cultu
	re: Population policy is the source of people to
	preserve their culture by avoiding and eradica
	ting the policy that is stated by the government
	nt. Example some tribe are like to bearing
	more children, female general mutilation and
	other,
	It is the source of population growth;
	The number of people can increased in the
	Country by not following the population policy
	in the country example the policy of using of
	family planning make the number of people to
	he recilled but when tradicatting we can
	create the high number of skilled labour in the
	country.
	Development of the economy in the
	country! This is occur when their is high nur
	ber of people in the country who can work
	alot of activities like in the production in
	industry, in agriculture, number of educated to
	increase and other.
	Population policy led the people to remove the life expectacy both because have the aim of reducing the number of people, but when we eraclicate
	Population policy led the people to remove the life
	expectacy beto because have the aim of reducin
	the number of people, but when we evaluate

Cont.	the population policy the life expectancy can be
	increased for the people.
	All in all; Population policy can ha
	both positive and negative impact is people-
	must be aware when they we there policies
	and the government must settle strong policy
	is the country that can be implemented for
	all beable

Extract 11.2: A sample of incorrect responses to question 11.

In extract 20, the candidate focused his/her response in what the population policy can achieve instead of pointing out the impact of the population policy which can be identified so far.

## 2.2.2 Question 12: Physical Resources

In this question, the candidates were required to explain why areas around volcanic mountains are densely populated despite the potential danger of erupting. The general performance of candidates in this question was average. The data showed that 40.87 percent of the candidates had good performance of 10.5 and above marks and 26.82 percent had average performance of 6 to 10 marks. The data further showed that the performance of 32.31 percent of the candidates was weak. Figure 10 shows the percentage of candidates in each category of performance.

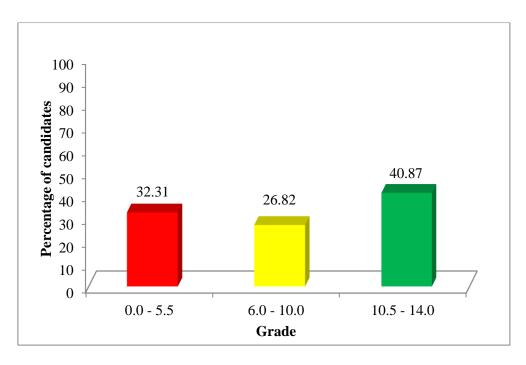


Figure 10: Candidates' Performance on Question 12

The analysis of candidates' responses was done to determine the reasons for their performance in each category. The analysis of candidates' responses with good performance (40.87%) showed that, they had good knowledge about the mountainous areas particularly volcanic mountains and why they are usually densely populated. The candidate were able to explain the reasons such as presence of fertile volcanic soil which is suitable for agricultural activities, presence of good climatic conditions modified by altitude, and volcanic mountains as tourist attraction which influence the emergence of other economic activities such as trade and accommodation. Some candidates also were able to explain reasons such as availability of minerals and the nature of raised land which is suitable for development of settlements. These kinds of responses showed that the candidates were able to make connections of the nature of volcanic mountains to the factors that attract people to live in those areas. Extract 12.1 is a sample of good responses from one of the candidates.

12	Volcanic mountain, are mountains which originated
	from expession of maging, which are igneous makingly from the
	ground example of volcance mountain a mountit kilimanjaro,
	also astive valuano in Olderyo lengai at Arusha region in Fan-
-	200'0;
	The volcanic areas are seems to be populated by
1	the people, this is due to the following reasons,
	Presence of good soil; The Fertility soil which is
	essential in different activities example agriculture activities, from
	the igneous makrials, this makes number of people to final
	areas in near the volcanic mountains where they can jectom
	the agriculture activity in presence of the feetile soil.
	Good climatic condition: In side of mountain exam.
	ple mount kelimaniero, has good climatic condition which
	is favorable in different asking us loo ward sich of the
	mountain, this afracts people to settle in the place
	of good climatic condition
	Attracts tourum activity; Presence of formed reliefy
	hat springs, and send moving example at Oldonya lengar,
	and mount kilmanicio, attracting the tourism activity, which
	enable other activities to take place like trade and bu-
	grees activities which arouses the economic and income
	to people near the volcenic maintains
	Presence of source of water : The volcanic places
	are characterized by having water from the ground example
	hotspray which ere wed in different activities of
	irrigation domestic use and inclustrial use through Hat
	most of people attracted to settle in the areas of the
	volcani mountain
	Presence of natural resources; In volcanic areas the
	I sould like they for land under, hatter water from the
	example hotopring wed in different purposes, also rock materials

12 Cont.	used also for construction, this is making people to
	used also for construction, this is making people to looks for so us to be using in different activities
	ties
	There for, volcanic mountains brings the passitive bene-
	fix to people, we should value them and their product,
	so us to prepare, also to take sake for people who live
	along volcance area, because if erupt can course negative
	effect like dealth of people and destruction of the
	proches.

**Extract 12.1:** A sample of good responses to question 12.

As shown in extract 12.1 the candidates explained sufficiently the reasons for the presence of dense population around volcanic mountains despite some grammatical errors in some sentences.

A sample of responses from the scripts of candidates with average performance (26.82%) was reviewed to determine the reasons for their performance. The results showed that, some of candidates in this category had grammatical errors in their explanation is some points which made it difficult to understand their arguments. Other candidates in this category repeated some of the points in different words to try to convince the markers that they were different points. Further review showed that, some of the candidates also lacked adequate knowledge on why people were attracted to settle around volcanic mountains. For Example, one candidate wrote "...is the source of capital, the volcanic can lead to an individual to obtain his/her own capital where he/she can be able to make his own development" Another candidate wrote; "it is a source of national income, the volcanic has led to the source of capital in our nation." These kind of responses are disconnected to the requirement of the question.

The review of scripts of candidates with weak performance (32.31%) revealed that, the major source of weak performance of the candidates in this category was misinterpretation of the requirement of the question. It was found that, instead of explaining the reasons that attract people to live around volcanic mountain despite their potential dangers, the candidates explained the possible negative impacts of living around volcanic mountains. The candidate explained the negative impacts in case of volcanic eruption such as *destruction of property and death of people*. Other explained socially related problems such as *lack of social services, poor* 

*infrastructure and spread of diseases*. Extract 12.2 is a sample of incorrect responses from one of the candidates in this category.

12	
Volcanic mountain refer to the mountain	'n
that its natural hy volcano erupted the	
volcano 1/2 the hot material that founded	
volcano 1/2 the het material that founded in the earth crist and 1/3 called 'Magma'	,
when Its empted near the surface	
1/2 carled "Lave" so the morntain that	
founded bothe Volcano are called Volcan	C
mountain They have hans Impact	C
The following are the negative Impar	J
of movolcanic mountain lette life of Human being sorounded area.	
being sorounded area.	
Lead to the death of people: 15	
the surface of the mountain When 15	
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Extract 12.2: A sample of incorrect responses to question 12.

In extract 12.2 the candidate tried to explain the negative impacts of volcanic mountains contrary to the requirement of the question. It is also noted that some of presented negative impacts are not correct. This is an evidence that the candidate apart from misunderstanding the question, also lacked sufficient knowledge.

# 2.2.3 Question 13: Principles of Teaching and Learning Geography

This question required candidates to suggest five methods of assessment which they can use to orient the newly employed teachers. The data showed that most candidates (52.99%) had average performance compared to those with good (21.33%) and weak performance (25.69%). Figure 11 presents a summary of the percentage of candidates in each category of performance.

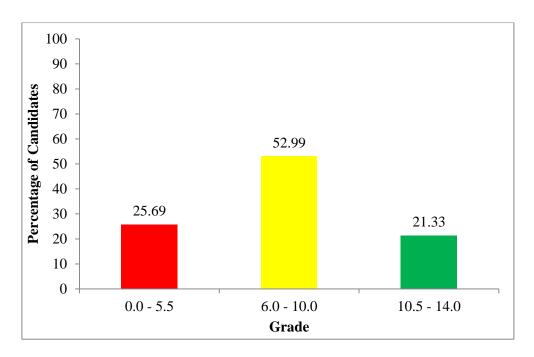


Figure 11: Candidates' Performance on Question 13

Samples of responses in candidates' scripts were analysed to determine the reasons for their performance in each category. The results showed that, the majority of candidates in this category understood the requirement of the question. However, they lacked sufficient knowledge of how the different methods of assessment can be applied. This caused the scores of candidates in this category to vary within the range of average performance.

The analysis of responses of candidates with weak performance showed that, the main reason for weak performance was misinterpretation of the question. The candidates misinterpreted the question in three ways. In the first scenario, the candidates explained what assessment can be used for instead of explaining the methods used in assessing students learning. The second misinterpretation was that the candidates explained different teaching and learning strategies contrary to the requirement of the question. Other misinterpreted the question by explaining methods which can be used to assess the performance of teachers instead of explaining methods of students' assessment. Extract 13.1 is a sample of incorrect responses from one of the candidates.

13 Assessment I the process of determing
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Extract 13.1 A sample of incorrect responses to question 13.

In extract 13.1 the candidate misinterpreted the question and focused his argument on how to orient the new teacher professionally instead of orienting him/her on assessment methods.

The candidates with good performance showed evidence of good understanding of the question. They also had adequate knowledge about different assessment methods and the best way to use them in assessing students learning. The candidates explained assessment methods such as paper and pencil method, observation, assessment portfolio, projects and anecdotal records. The explanations in these areas indicated that the candidates had sufficient knowledge in the areas of assessment. extract 13.2 shows as sample of good responses from one of the candidates.

13	Assessment, This is the process of Collecting
	the informations in order to make decision on the
	improvement of learner's archievement in teaching
	and learning profess.
	The following are the methods of assess
	ment that the newty employed teachers should
	be orianted and they can use in teaching
	and earning process
	Test examination, This is the method of
	assessment in which a teacher will use the
	Series of questions in order to measure the
	procress of the learner in the whole process of
	teaching and tearning.
	Assignment, This is the work whi-
	Feaching and learning.  Assignment, This is the work which che Should provided by a teacher for the
	individual learner or groups that Contain
	of Same questions that a Student Should
	respond to answer that quartons and a
	reacher Should assess the learning developm- ent and archievement of the learner.
	ent and archievement of the learner.
	Observation, This is the another method
	that a teacher can used in order to make the psessment in archievement of teaching and
	alsessment in achievement of teaching and
	earning process in which a teacher Should
	observe while the student is demostrating the
	Consept when given by a teacher.  Portifolio, This is the Systematic Collection
	portifolio, his is the Systematic Collection
-	of an individual Sample of work's that Can
	be used in making the assessment for the leavner
	in the teaching and learning process in the
	whole process of teaching and learning.
	Anecdotal records, This is the documents-

13 Cont.	or information (oflected by a teacher ushich Conta-
	ins the reports of Same observed behaviors of
	an individual learnery in teaching and learn-
	ing process, and it can be used at aluming ma
	ating the assessment of the learnery to
	the Feaching and earning process.
	It general the teacher to apply the
	appropriate method of assessment to the learner is
	very important because it help a teacher to
	paneterstand different dithiulters that hinder the
	learner to achiever archieve their gods in
	the extraction context.

**Extract 13.2:** A sample of good responses to question 13.

# 2.2.4 Question 14: Principles of Teaching and Learning Geography

In this question, the candidates were required to support the statement that, teaching and learning geography cannot be successful without the use of inquiry based teaching strategy. The general performance in this question was good. The data showed that the majority of the candidates (59.29%) had average performance of 6.06 to 10 marks and 21.65 percent had good performance of 10.5 to 15 marks. This makes 80.9 percent of the candidates scored 6.0 and above marks (see Figure 12).

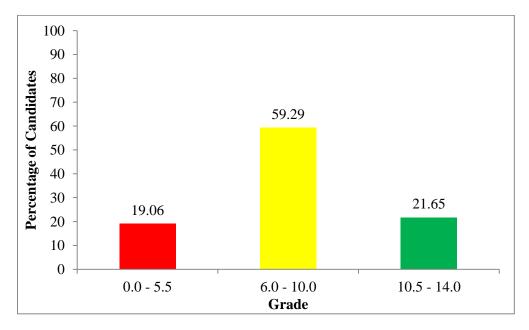


Figure 12: Performance of candidates on question 14

The analysis of candidates' responses showed that, the candidates with average performance (59.29%) provided a mixture of responses. Some of the points in their answers were correct while other were partially correct. Others gave fewer points than required by the question and some repeated the points in different words as different points.

The analysis of responses of candidates with good performance (21.65%) showed that the candidates had adequate knowledge of the benefits of inquiry teaching strategy. In addition, these candidates were able to present convincing arguments about the benefits of the inquiry strategy in a logical manner. They supported the statement with argument such as the inquiry approach activates the brain and therefore helps retention of long-term memory. Promoting deeper understanding of concepts and the content in general, helps students to feel the intrinsic reward of learning and building initiative and self-direction in learning. Generally, the candidates in this category showed good understanding of this teaching strategy and its potential in enhancing learning of Geography subject. Extract 14.1 Is a sample of one of the candidate's responses in this category.

14.	
	Inquiry teaching Italogies, Are the principle
	oftenhing geography that geat with the
	reseach analysis and interpretation of
	different problem phenomena. The inquiry
	It not alone as the principle of the goography
	teaching and learning there is another
	like Sobservation of cause, effect spartial
	or Ther tanding as well as Quantilate
	approach withe leaching geography
	The following arethe impurfance of the
	of the inqury teaching Method as alechniques
	and prihapu of teaching bengaphy
	Improve logical thinking of the
	student: It wear that the student
	they become logically by reasoning
	because they have think the different
	Kind of the problem that face the
	somety so we need to think in vers
	Wide distance to get solution

	Learner become problem solverills
	Means that the inquiry we that they helped the learner to become the
	helped the learner to become, the
	problem solver quetothe show the
	very well technique of some the
	very well technique of sohe the
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	of early mariage unto Village 10
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	problems los Dias the Inguare Methel
	of leading and leaves process so
	Thone among them
14 Cont.	
	Participatory better juste lesson: 1/3
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	to the leader because they there the I dew
	between the leader and student is as
	they cause the student tolecame more effectively by geography subjects Increase manipulated stills and knowledge: Its Means that the learner
	Investo man plated dillicad
	Knowldge; It Mans that the learner
	Mincrease Mai Dubated that boarde
	they have we their self ability so solve forme kind of problem that faced the south so 1/2 one among how.  Help the student in the research activity:
	Ine Kind of problem that faced the
	society solls one among low.
	Help the student in the research actually
	17 rear That They have help in the
	research problem suas they became the
	research problem so as they became the thinkable and also are Used them to the shape of different achiety.  Source of Motivation in the lesson is to
	Student ideology of different activity.
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**Extract 14.1:** A sample of good responses to question 14.

On the contrary, the candidates who scored poorly (19.06%) lacked knowledge of the benefits of the inquiry teaching strategy. The analysis on the responses in this category showed that some of the candidates explained teaching strategies in general while others explained the areas in Geography which the inquiry teaching strategy can be applied. This consequently led to providing irrelevant points or mentioned the points but failed to show how they are related to the inquiry in respect to learning Geography subject. It was also found that some of the candidates were able to provide a mixture of correct and incorrect points. For example, in answering this question one candidate explained the application of different teaching strategies such as the *jig saw, question and answer, role play, gallery walk* and *study tour* contrary to the requirement of the question. Extract 14.2 shows one of the incorrect responses from one of the candidate in this category.

14	Teaching persons to the facilitation
	of student learning and It Involves trunshor
	of student learning and It Involves truncher of knowledge and skills to the student also inquiry report to asking for information.  YES Its true Hoat leaching and
	inquiry report to asthing for information.
	les its true Hoat leaching and
	Learning geography can not be successful
	Williams application of inquiry based teaching
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May contribute different wear about forest
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byed to aching strategy is remy Important as It capture the prior knowledge of stude
At because of familiarity of topic to to
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D 11 10-11 1: 18

Extract 14.2: A sample of incorrect responses to question 14.

As shown in extract 14.2 the candidate explained the areas or topics which the inquiry teaching strategy can be used instead of why teaching geography would not be successful without the use of the inquiry teaching strategy.

## 3.0 PERFORMANCE OF CANDIDATES IN EACH TOPIC

The analysis of questions composed from same topics was done to determine the performance of candidates in each topic. The analysis showed that, out of the 10 assessed topics, the performance of candidates was good in three topics; average in four topics and weak in three topics. The candidates' performance was good in the topics of *Population and Development (98.90%)*, Assessment in Geography (80.90%) and Principles of Teaching and Learning Geography (71.95%). The performance of candidates was average in the topics of Physical Resources (67.70%), Weather and Climate (63.70%), Human Occupation and Economic Development (54.75%) and Geography Teaching and Learning Support Resources (49.55%). On the other hand, the performance was weak in three topics namely: Geomorphic Processes (21.60%), Map Reading and Photograph interpretation and Geography Discipline (10;20%).

Further analysis showed that, the performance of candidates in general when compared to 2021 examination decreased. The decrease in performance is caused by reduction of the number of topics with good performance from six in 2021 to only three in 2022. It was also noted that, the number of topics with average performance increased from three in 2021 to four in 2022. In addition, the analysis showed that, while there was no topics with weak performance in 2021 examination, three topics in the 2022 examination had weak performance. Out of those topics the performance of candidate in two topics namely *Geomorphic Processes* and *Map reading and Photograph Interpretation* decreased from average to weak performance, the performance of candidates in one topic (Weather and Climate) continued to be average.

### 4.0 CONCLUSION

The performance of candidates in Geography paper indicated that 99.02 percent of the candidate passed the examination. This was 0.98 lower than that of the 2021 examination where 100 percent of the candidates passed the examination. When examined in detail it was found that the performance of candidates in three topics was weak. The performance in these topics was average in the 2021 examination which means that they have deteriorated further. It was also noted that the number of topics with average

performance increased from three in 2021 to four in 2022. The main reasons for weak performance in some topics was inadequate knowledge of candidates in some topics and misinterpretation of the questions which led to providing irrelevant responses to some of the questions. With such an analysis, it is therefore necessary to look for ways to improve the performance of the topics in which candidates' performance was weak and the four topics in which the performance was average. This will lead to the improvement of performance in the subject in general.

#### 5.0 RECOMMENDATIONS

In order to improve performance especially for the three topics which had weak performance, it is recommended that:

- (a) Tutors should use practical and assignments in teaching map reading and photograph interpretation skills in groups and individually. In order to help student-teachers to understand their shortcoming in learning, the tutors should accompany the practical and assignments given with immediate feedback. Feedback helps the student-teacher to improve their learning styles.
- (b) In improving the teaching and learning of the topic on Geomorphic processes, tutors should utilize the use of the actual environment, textural materials and pictures to make them connect the topic they learn in the classroom with reality.
- (c) It is also suggested that, tutors should use different teaching and learning styles such as brainstorming, library readings, discussion, browse the internet in order to understand the multidisciplinary nature of Geography.

THE PERFORMANCE OF CANDIDATES IN EACH TOPIC

**Apendix** 

#### Percentage of Average Number Candidates performa who Scored of nce per **Topic** S/N Remarks **Questions** an average of topic per Topic 40 percent and above 1. Population and 11 98.9 98.9 Good Development. 2. Assessment in Good 13 80.9 80.9 Geography. 3. Energy Resources Good 72.21 10 72.21 Principles of 6 63.0 Teaching and Good 4. 71.95 Learning 14 80.9 Geography Physical 12 67.7 5. 67.7 Average Resources Weather and Average 2 63.7 63.7 6. Climate. Human 4 34.9 Occupations and Average 54.75 7. Economic 9 74.6 Development. Geography 8. . 1 30.8 Teaching and Average 49.55 **Learning Support** 7 68.3 Resources. 9. Geomorphic 3 21.6 21.6 Weak Processes. 10. 3 Map Reading and 8 15.2 15.2 Weak Interpretation. 11. Geography 5 10.2 10.2 Weak Discipline