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

# CANDIDATES' ITEMS RESPONSE ANALYSIS REPORT FOR DIPLOMA IN SECONDARY EDUCATION EXAMINATION (DSEE) 2020

## 713 GEOGRAPHY

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# FOREWORD

The National Examinations Council of Tanzania is pleased to issue the Candidates' Item Response Analysis (CIRA) for Diploma in Secondary Education Examination (DSEE) which was held in June, 2020. The report analyses the performance of candidates in Geography examination paper. The report is expected to provide feedback to stakeholders about the performance of the candidates in summative evaluation of the subject.

The candidates' responses to examination items is one of the strong indicator of what the education system was able or unable to offer to the teacher trainees in their two years of Diploma in Secondary Education studies.

In this report, the factors which contributed to successful attempt of candidates to the examination items have been analysed. Similarly, the factors which led to insufficient responses to the questions have also been analysed. The analysis showed that, the candidates with good performance provided appropriate responses. They were able to understand the demands of the questions; had good knowledge of the subject matter, had good English Language proficiency and exhibited good essay writing skills. The candidates' weak performance was generally a function of misunderstanding of the questions, poor content knowledge and lack of good presentation skills.

The feedback provided is expected to enable educational administrators, managers, tutors and teacher trainees to identify proper measures to be taken in order to improve the candidates' performance in future examinations administered by the Council.

Finally, the Council is grateful to all stakeholders who provided valuable contributions in the preparation of this report.

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

## 1.0    INTRODUCTION

Geography paper was set based on the Geography Academic syllabus for Diploma in Secondary Education and the Geography Pedagogy Course Syllabus for Diploma in Secondary Education which were both issued in 2009. The paper consisted of sixteen (16) questions distributed in three (3) sections; A, B and C. The candidates were required to attempt 14 questions. Section A consisted of ten (10) short answer questions which were compulsory. The questions were set from both Academic and Pedagogical Syllabi. All questions in this section contributed a total of 40 marks. Each of the sections B and C comprised of three optional essay questions. Questions in section B were based on the Academic syllabus wile questions in section C comprised of questions from the Pedagogy syllabus. The candidates were required to attempt two questions from each of the sections. Each question in these sections carried 15 marks making a total of 60 marks.

A total of 997 candidates were registered to sit for the 2020 Geography examination paper. Out these candidates, 984 (99.92%) sat for the Geography examination paper. The remaining 13 (0.08%) did not sit for the Geography examination paper. Generally the performance in Geography examination in DSEE 2020 was good since all candidates who sat for the examination were able to pass.

This report categorise the performance of candidates into three main groups according to the percentage of score the candidates were able to attain in relation to the total marks. The categories based on the range of percentages of score are poor (0 - 39%), average (40 - 69%) and good (70 - 100%). In analysing the candidates' performance, green, yellow and red colours were used to indicate good, average and weak performances respectively.

The report is presented by indicating the tasks of each question and the analysis of the candidates' good, average and poor responses. The samples of the candidates' answers are attached to illustrate the responses.

It is expected that the report will be useful to educational stakeholders. It will enable tutors, teacher and student-teachers in particular to improve the teaching and learning process of Geography and eventually enhance candidates' performance in the subject.

# 2.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE IN EACH QUESTION

## 2.1 SECTION A: Academic and Pedagogy Contents

The performance of candidates in each question in Section A was categorised in three qualitative levels; Weak, Average and Good. The candidates' raw scores in each question were computed into percentages to reflect these classifications. The intervals which were used are 0 – 39 percent, 40 – 69 percent, and 70 – 100 percent to represent weak, average, and good perfromances respectively.

### 2.1.1 *Question 1: Energy resources.*

In question 1, the candidate were required to describe four concepts as they are used in geographical context namely; *Tidal power*, *Wind energy, Biogas* and *Geothermal power*.

The analysis of candidates' performance in this question indicated that 44.61 percent of the candidates scored from 3 to 4 marks, 32.11 percent scored from 2 to 2.5 marks, and 23.27 percent scored from 0 to 1.5 marks of which 4.06. percent scored 0 mark. The performance of candidates in this question was good since 76.73 of the candidates scored from 2 to 4 marks. Figure 1 is a summary of the candidates' performance in Question 1.
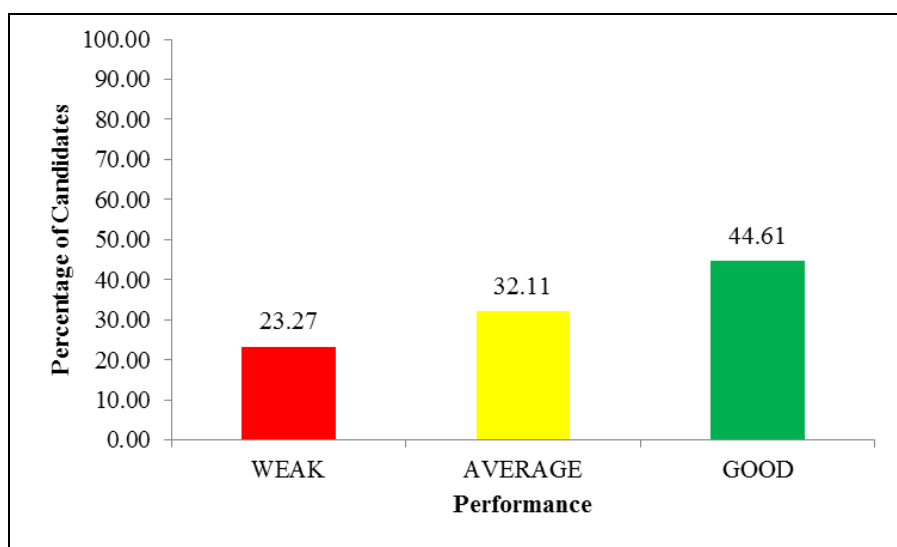


**Figure 1**: *Candidates' Performance in Question 1.*

The candidates with good performance (scored from 3 to 4 marks) had adequate knowledge on energy resources, especially on the types of energy resources. They were able to provide correct meanings of the terms *tidal power*, '*wind energy*, *biogas* and *geothermal power*. For example, one of the candidates managed to provide correct description of geographical phenomena such as Tidal power, Wind energy, Biogas and Geothermal power. Extract 1.1 shows a sample of a good response by one of the candidates.



Extract 1.1: A sample of good response by one of the candidates.

In extract 1.1, the candidate was able to describe correctly the four concepts as they are used in the Geography subject.

The 32.11 percent of candidates who scored from 2 to 2.5 marks provided partially correct responses. They either partially provided correct responses in three points or provided two correct responses while missing the rest of the points. For example, one candidate described correctly wind energy and biogas but described Geothermal power incorrectly as *the source of energy that supply electricity obtained from direct sun light and other heat sources.* The candidate was also incorrect in describing *tidal power as the energy source obtained from oceanic current to support energy supply like hydroelectric power supply such as Nyjmba ya Mungu and Mtera dam.* This suggested that they had limited knowledge of the concept

of energy resources. Furthermore, there were some candidates who were able to give less number of correct points on energy resources. These failed to give descriptions and examples to support their points. Therefore, their score ranges were determined by the clarity of their responses.

Besides, the good performance of the candidates in this question, 23.27 percent of candidates performed poorly as their scores ranged from 0 to 1.5 marks. Candidates in this category failed to meet the demand of the question in all parts while others answered all the parts partially. In part (a), (b), (c), and (d) some of the candidates were able to give a correct description about energy resources but failed to provide vivid examples about these terminologies. For example, one candidate described Tidal power as …*the power that can be generated due to the tides in the ocean or sea* but without giving any examples, he/she also described *wind energy as the energy that is generated from blowing wind.* Extract 1.2 is an example of the poor responses.



Extract 1.2: A sample of incorrect response by one of the candidates.

Extract 1.2 shows a sample of the candidates who lacked knowledge of the given terminologies. In this extract, although the candidate understood the demand of the question, he/she lacked the knowledge of the given terminologies and hence provided incorrect responses.

### 2.1.2 *Question 2: Environmental Problems and Issues*

In question 2, the candidates were required to mention four environmental problems in Tanzania. The data analysis showed that, 55.79 of the candidates scored from 3 to 4 marks which is a good performance. On the other hand, 26.83 percent of the candidates scored from 2 to 2.5 marks signifying average performance. The remaining 17.38 percent of the candidates scored from 0 to 1.5 marks and out of these, 4.06 percent of the candidates scored 0 mark. The general performance of the candidates in this question was good, as 82.62 percent of all the candidates scored above average marks (2 to 4 marks). Figure 2 presents the candidates' performance in Question 2.
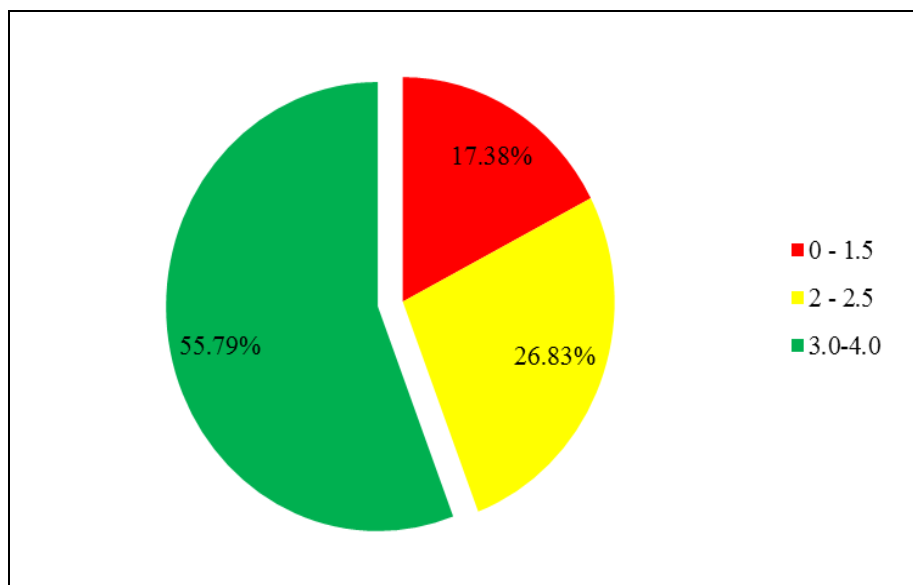


**Figure 2**: *Candidates' Performance in Question 2.*

The analysis of the candidates' responses indicates that the candidates who scored high marks (3 to 4) understood the demand of the question and had adequate knowledge of the subject matter. They managed to mention four environmental problems in Tanzania correctly. The good performance of the candidates in this question was due to the fact that most of the candidates were familiar with the environmental problems facing Tanzania, so they were able to apply the knowledge in answering the question. Extract 2.1 is a sample of a good response.

Extract 2.1: A sample of good response by one of the candidates.

In extract 2.1, the candidate outlined four environmental problems in Tanzania correctly such as *land degradation, soil erosion, drought and flood.* This suggests that the candidate was aware of environmental problems in Tanzania.

The analysis from the scripts of the candidates who scored from 2 to 2.5 marks revealed that, most of them had partial knowledge on environmental problems. Some of the candidates provided a mixture of correct and incorrect points while others mentioned a few points correctly. For example one candidate explained environmental problems in Tanzania as *deforestation, soil pollution, mining activities and agricultural activities. air pollution and water pollution.* While the first two were correct responses, the remaining two required justification on why they are environmental problems. Generally, the variation of the candidates' scores depended on the number of correct points provided and the clarity of the points outlined.

Further analysis indicated that among the 17.38 percent of the candidates who scored from 0 to 1.5 marks, had inadequate knowledge on the environmental problems facing Tanzania. For example, one candidate wrote *earthquakes, volcanism, natural hazards and floods* as the four environmental problems in Tanzania. In this list only floods can be associated with environmental problems. Some of the candidates failed to understand the demand of the question. Some of the candidates managed to outline few correct environmental problems facing Tanzania, while others outlined the effects of environmental problems. For example, one candidate wrote *chemical hazards, biological hazards, natural hazards and earthquakes as the four environmental problems in Tanzania.* In addition, due to insufficiency of knowledge about environmental problems facing Tanzania, 4.06 of candidates failed to score any mark in this question as they failed to meet the demand of the question.

This is an indication of the lack of knowledge on environmental problem as shown in Extract 2.2.

| | |
|---|---|
| 2. | four environmental problems in Tanzania. |
| | |
| | i/ polical problem. |
| | ii/ social problem |
| | iii/ economic problem |
| | iv/ Cultural problems. |

Extract 2.2: A sample of incorrect response by one of the candidates.

In extract 2.2 the candidate outlined problems facing the society instead of the environmental problems in Tanzania. This is an indication that the candidate lacked knowledge on the subject matter as he/she could not differentiate social, political, cultural and economic problems from environmental problems.

### 2.1.3 *Question 3: Physical Resources*

The candidates in this question were required to give four importance of soil texture. The general performance of the candidates in this question was average because 41.81 percent of the candidates scored in range of 2 to 4 marks. The analysis of data showed that, 15.06 percent of the candidates were able to score 3 to 4 marks (good performance), and 26.75 percent of the candidates were able to score from 2 to 2.5 (average Performance). The question was challenging to most candidates since 58.19 percent of the candidates scored poorly from 0 to 1.5 marks. Out of these candidates 27.33 percent were not able to provide any correct response leading to a 0 score. The performance of candidates in this question is illustrated in Figure 3.
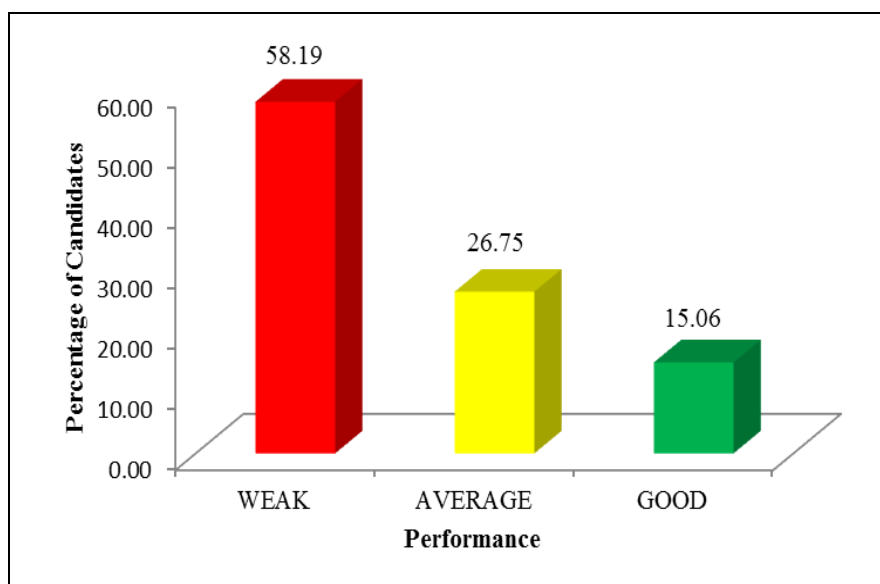
**Figure 3**: *Candidates' Performance in Question 3.*

The analysis indicates that the candidates who scored high marks (3 to 4) had adequate knowledge about the importance of soil texture. Most of the candidates in this category were able to give three to four of the required number of points. They also demonstrated good English Language skills which enabled them to present their points clearly. The correct responses given by the candidates were such as: *soil texture influences microorganism activities in the soil, helps water availability in the soil*, *it helps aeration in the soil and it enables plant roots to penetrate*. Variations in the candidates' scores were determined by the clarity of their answers for each point given. Extract 3.1 is a sample of a good response.



Extract 3.1: A sample of good response by one of the candidates.

On the other hand, 26.75 percent of candidates who scored average marks (2 to 2.5) had partial knowledge on the subject matter particularly the importance of soil texture. The candidates in this category had several weaknesses in their responses. While others managed to give few correct points, some gave a mixture of correct and incorrect points. For example, one candidate provided the following responses; *facilitate growth of plants, it helps to store water for long period, it helps to store soil nutrients and it helps to reduce erosion.* While the two responses were correct, the other two responses were not correct. For example, not all kinds of soil texture stores water for long period of time in the soil. It is also not true that all type of texture reduce soil erosion. Moreover, some of the candidates wrote poor partial explanations while others responded with few correct points. For example another candidate wrote; *it can used in the studying the nature of soil in the area, it help in determining the area for settlement ti helps to motivate development in the area.* Apart from the fact that only the first point has some element of truth; the responses also had many grammatical errors. The degree of correctness of the candidates' responses differed, which led to differences in the quality of their answers and hence differences also in their scores. .

Furthermore, the candidates who scored from 0 to 1.5 marks had insufficient knowledge about the importance of soil texture. Some of the candidates explained the types and features of soil while others mixed factors for soil formation instead of the importance of soil texture. For example, one of the candidates provided factors such as: *"helps in soil formation, help to identify different type of soil, helps to identify different colour of the soil and helps to identify kind of crops to be cultivated"*. Extract 3.2 is another sample of the candidate who showed lack of knowledge of the importance of soil texture.



Extract 3.2: A sample of poor response by one of the candidates.

In Extract 3.2 the candidate failed to explain the importance of soil texture.

While soil texture may be linked with agriculture, it cannot be used to determine the climate of a place rather climate is determined by other factors such as amount of rainfall, temperature, humidity and cloud cover.

### 2.1.4 *Question 4: Geomorphic Processes*

In question 4, the candidates were required to describe the four given geographical concepts which were; (a) Fault scarp, (b) Rift valley, (c) Block Mountains, and (d) Earth quakes. The analysis showed that, 46.85 percent of the candidates performed well by scoring from 3 to 5 marks and 45.73 percent of the candidates scored from 2 to 3.5 marks signifying average performance On the contrary, 7.42 percent of the candidates scored from 0 to 1.5 marks which is a weak performance. In this category, candidates 0.91 percent were not able provide any correct response and hence they scored a 0 mark. The general performance of the candidates in this question was good since 92.58 percent of the candidates scored from 2 to 5 marks. The performance of candidates in this question is further illustrated in Figure 4.
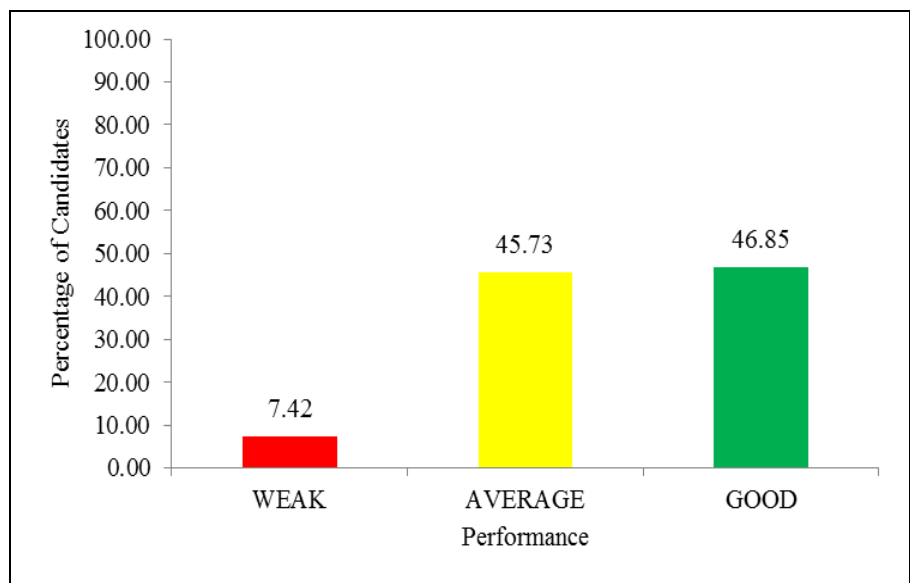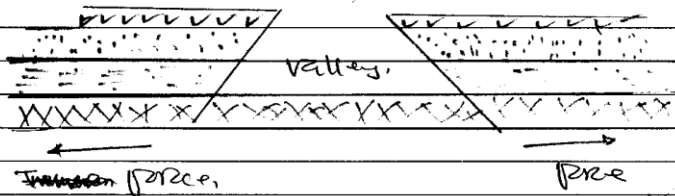


**Figure 4**: *Candidates' Performance in Question 4.*

The 46.85 percent of the candidates who scored from 3 to 5 marks were able to respond correctly to three or all four geographical concepts. Most of the candidates were able to describe the concepts tested. They managed to describe the concepts backed with diagrams to illustrate their answers. For example one of the candidates responded as as shown in extract 4.1.



Extract 4.1: A sample of good response by one of the candidates.

The candidates who performed averagely (2 to 3.5 marks) had partial understanding of concepts which were being assessed. Most of the candidates in this category explained the processes by which these features are formed instead of describing what they are; resulting to the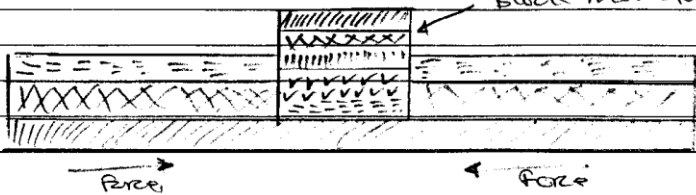ir partially correct responses which consequently led to their moderate scores. For example, one candidate responded as follows;

(a) *Fault scarp are the features which are formed due to faulting of mountain;*
(b) *Rift valley refer to the features which are formed after the eruption of molten materials to the earth;*
(c) *Block mountain are the mountains which are formed to eruption of magma and ejected outside the earth's crust;*
(d) *Earthquakes refer to the suddenly vibration or shaken of the earth's crust after the molten material want to make balance to each other under the earth's crust.*

In this candidate's responses, the description of Block Mountains and rift valley were completely incorrect. The candidate confused the formation of Block Mountains to the formation of volcanic Mountains. The candidate also incorrectly associated eruption of magma to the formation of rift valley. The rest of the responses had some truth but generally incorrect. While a Fault Scarp is a result of faulting, the candidate failed to describe what they are. He/she could not differentiate them with other features which are a result of faulting. The candidate was also partially correct in describing earthquakes as a sudden vibration or shaking of the earth's crust. However, the reasons for such vibration were not correct.

Further analysis indicates that the candidates who scored from 0 to 1.5 marks had generally insufficient knowledge about these geographical phenomena. The candidates lacked the facts which were required to explain the concepts correctly. For example, one of the candidates provided descriptions such as shown in Extract 4.2.

Extract 4.2: A sample of incorrect response by one of the candidates.

In Extract 4.2 the candidate failed to describe what these geographical concepts mean instead the candidate partially tried to describe the causes of these features which was not the focus of the question.

### 2.1.5 *Question 5: Human Occupation and Economic Development.*

In question 5, the candidates were required to describe three socio-cultural factors which encourage the development of tourism in Tanzania. The question tested candidates' knowledge on human occupation and their connection to economic development. The analysis of the candidates' performance showed that, 30.49 percent of the candidates scored 3 marks which is a good performance, and 49.09 percent scored from 1.5 to 2.5 marks signifying average performance. Further analysis indicated that 20.43 percent of the candidates scored from 0 to 1 mark signifying weak performance. Out these candidates, 2.94 percent were not able to provide any correct responses which led to such candidates to score 0 mark. The performance in this question was categorised as good because 75.57 percent of the candidates were able to attain the pass mark which ranged from 1.5 to 3 marks as summarized in Figure 5.

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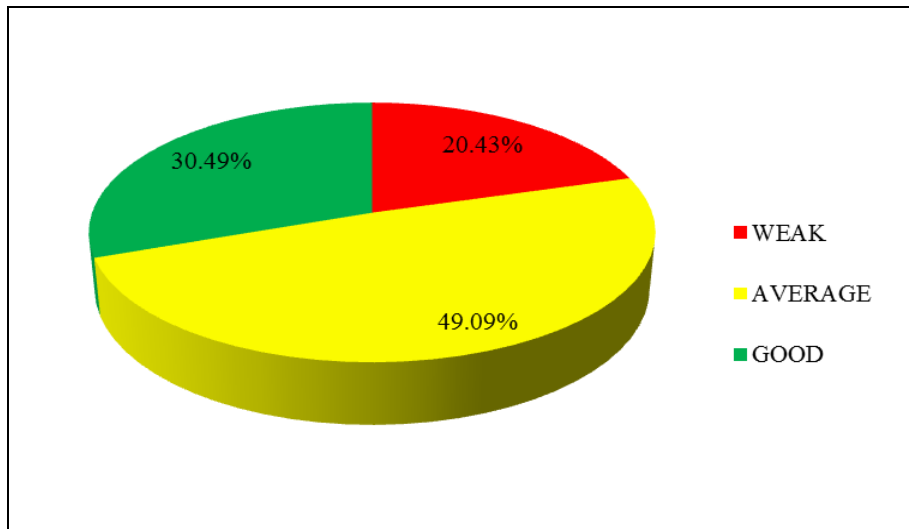**Figure 5**: *Candidates' Performance in Question 5.*

The analysis of the candidates' responses showed that candidates who scored higher marks (3) understood the demand of the question and had adequate knowledge of socio-cultural factors which encourage the development of tourism in Tanzania. Extract 5.1 present a sample of relatively correct responses.



Extract 5.1: A sample of candidate's good response.

In extract 5.1 the candidate was able to correctly describe three socio-cultural factors which can encourage the development of tourism in Tanzania.

The analysis of the candidates' responses indicates that most of the 49.09 percent of the candidates with average performance in this question failed to exhaust fully the required points. This revealed that they had inadequate knowledge of the socio-cultural factors encouraging the development of tourism in Tanzania. Some of the candidates mentioned two correct points while others identified two partially correct points. For example, one candidate in attempting the question wrote the following;

(a) *Peace and security: where in Tanzania there is peace and security which make many tourists to come to make tourism*

(b) *Hospitality of 'Tanzanians: Tanzanian people are very welcoming people and are hostile to guests, this attract many tourists.*

(c) *Availability of Social services like traditional dances and traditional wearing styles e.g the Maasai wearing style.*

In the above candidate's response, (a) and (c) were correctly presented despite having some grammatical errors. The second factor was also correct however the use of the word "hostile" negated the point.

Further analysis showed that the candidates who scored from 0 to 1 mark had inadequate knowledge on the subject matter, while others did not understand the demands of the question. Other misconceived the tourist attraction such as good scenery, good climatic conditions to socio-cultural factors as shown in Extract 5.2.



Extract 5.2: A sample of incorrect response by one of the candidates.

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In the example given above, the availability of social services such as water, health and electricity provided by the candidate can indeed fall under socio-cultural factors. However, the availability of attractive sceneries and good climatic conditions are physical factors rather than socio-cultural factors.

### 2.1.6 *Question 6: Geomorphic Processes*

In this question the candidates were supposed to analyse four effects of earthquake in the environment. The question tested the candidates' knowledge of geomorphological processes. The analysis showed that 84.04 percent scored higher from 3 to 4 marks (good performance) making this as one of the questions which the candidates' performance was good. Furthermore, 14.33 percent scored from 2 to 2.5 marks which is average performance. This makes the general performance in this question good because 98.4 percent of the candidates performed at pass mark level (2 to 4 marks). The analysis further indicated that 1.63 percent of the candidates scored from 0 to 1.5 marks indicating a weak performance Figure 6 illustrates further the candidates' performance in this question.
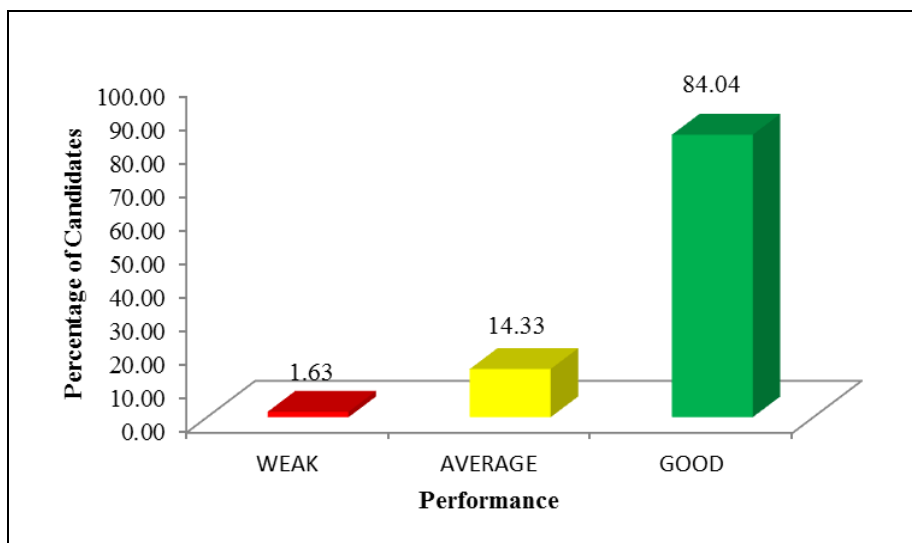


**Figure 6**: *Candidates' Performance in Question 6.*

The analysis indicated that most of the candidates ( 84.04%) who performed well (scored from 3 to 4 marks) were able to answer this question correctly by describing at least three or four effects of

earthquake in the environment. The candidates were expected to provide clear descriptions of the four effects of earthquakes in the environment such as;

(i) *Destruction of houses and other property; earthquake lead to the destruction of infrastructure such as building , roads, bridges, business and settlements which are used by people for different activities;*

(ii) *Death of people; earthquake can cause death of people due to shaking of earth which result into breakdown of building and which eventually fall and burry people and cause death ;*

(iii) *Economic hardship: intense earthquake can cause destruction which later can make the country incur a lot of expenses in rehabilitation of the destroyed infrastructure and to support people who lost their homes.*

(iv) *Possible flooding; earthquake can lead to the occurrence of floods in case the earthquake hits in the ocean and triggers a tsunami.*

Most of the candidate whose performance was good provided similar effects which led to such candidates to score higher. Extract 6.1 shows a sample of a response from the candidate who managed to describe four effects of earthquake in the environment correctly.



Extract 6.1: A sample of good response by one of the candidates.

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Moreover, the 14.33 percent of the candidates who scored averagely from 2 to 2.5 marks had insufficient knowledge of the subject matter. They partially described correctly the effects of earthquake in the environment. Some of the candidates provided correct responses only to two correct responses and one partially correct response which made them to get moderate scores. For example one of the candidates in this category analysed the effects of earthquakes as;

> (*a) it leads to death: this means people and other living things may die (b) Loss of property: such as house and different things such as bridges (c) leads to land formation such as cracks which becomes an attractive site for tourists. '(d) it causes the volcanic eruption in the areas with cracks since moves in different areas.*

In this candidate's response, points (a) and (b) were correct however, points (c) and (c) of their responses were incorrect. Earthquakes do not lead to land formation nor do they cause volcanic eruption. This led to such candidates to score moderate scores.

Further analysis indicates that some of the candidates who scored 0 to 1.5 marks had inadequate knowledge of the subject matter as they provided incorrect descriptions on the effects of earthquake in the environment. The analysis showed that the candidates who got 1.5 marks in this question were able to provide a mixture of correct and incorrect responses by mentioning at least one correct effect and one or two partially correct responses as indicated in extract 6.2.



Extract 6.2: A sample of incorrect response by one of the candidates.

In the candidate's response in extract 6.2, the first effect was correct. However, the second and third points were not correct. Earthquakes are not among the causes of skin cancer nor do they lead to formation

of land form. The internal forces which cause any two plates to exert force against each other may result into the formation of landforms or trigger an earthquake.

### 2.1.7 *Question 7: Geomorphic Processes*

In attempting this question, the candidates were required to describe dendritic and trellis drainage patterns with the aid of diagrams. The question assessed the candidates' ability to assess the consequences of geomorphic processes.

Data analysis showed that, 14.23 percent of the candidates were able to score from 4 to 5 marks which was good performance and 17.48 percent of the candidates were able to score from 2 to 3.5 marks implying average performance. Further analysis showed that, 68.29 percent of the candidates scored from 0 to 1.5 marks, making the performance of candidates in this question weaker than it is in the rest of the questions. The performance of the candidates in this question can be categorized as weak since only 31.71 percent of the candidates were able to score within the pass mark range from 2 to 5 marks. The performance of candidates in question 7 is further illustrated in Figure 7.
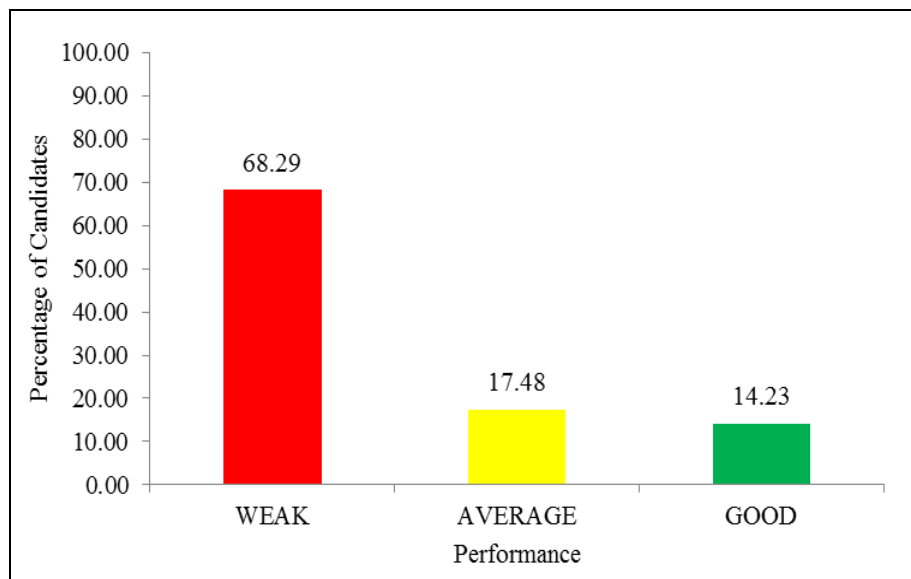


**Figure 7**: *Candidates' Performance in Question 7.*

As indicated in figure 7, the performance of the majority of the candidates (68.29%) was weak. The reasons for poor performance were limited knowledge of the candidates about the assessed drainage patterns (dendritic and trellis drainage pattern). For example one candidate described incorrectly the two concepts as follows;

> *"Dendritic pattern is the type of drainage pattern that is used in the map to show the physical features of the map while trellis drainage pattern is the type of drainage pattern which show the natural and physical features of the earth in the map construction.*

In the above response, the candidate associated incorrectly the two concepts with map construction skills instead of describing how the two drainage patterns look like and why. The candidate incorrectly assumed that dendritic and trellis drainage pattern are ways of showing physical and natural features on map.

Some candidates mixed relevant and irrelevant responses by describing correctly one of the drainage patterns but failed to describe the second pattern or gave incorrect illustrations. For example, one of the candidates wrote the following relevant responses; *dendritic drainage pattern: this can be described as the one formed due to different feed streams to form the main stream forming a tree-like structure.* The candidate was also able to draw a diagram to illustrate his/her answer correctly. The candidate however could not correctly describe trellis drainage as … *the drainage pattern which distribute to different sources.*

Further analysis of candidates' scripts revealed that, some of the candidates had an idea of the requirement of the question but; they lacked the knowledge to support their intentions. Due to lack of sufficient knowledge, some of the candidates described the two concepts interchangeably as shown in Extract 7.1.
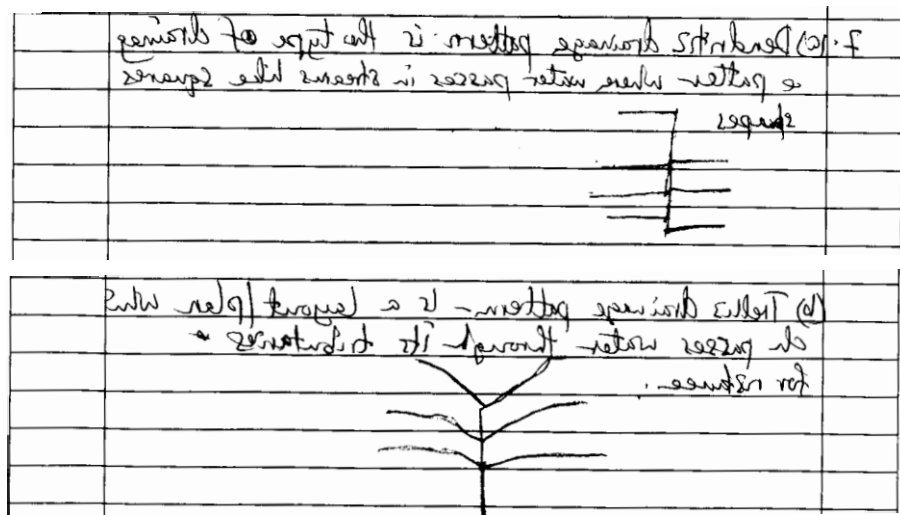
Extract 7.1: A sample of candidate's incorrect response

Furthermore, the candidates who scored moderately from 2 to 3 marks had poor knowledge of dendritic and trellis drainage pattern. The candidates understood the demand of the question but failed to provide all the facts to arrive at correct responses. In addition, some candidates could respond correctly on one type of drainage pattern but incorrectly on the other.

Besides the average performance in this question, 14.23 percent of the candidates managed to comprehend the demand of the question. The candidates had sufficient knowledge to describe clearly the two types of drainage and hence were able to score from 4 to 5 marks which is a good performance. These candidates managed to describe dendritic and trellis drainage pattern as follows;

   *Dendritic drainage pattern is the type of drainage where by the river tributaries flow from different directions and join the main river to form a tree-like structure while Trellis drainage pattern occur according to the nature of rocks which result to the river flow to follow the part of soft rock and the result is the formation of the type of drainage where tributaries meet the main river at definite angles such as angle of 90 or main river itself can make a turn at 90 degree.*

Furthermore, these candidates had good English Language skills which enabled them to express themselves clearly. Extract 7.2 is a sample of response from a script of a candidate with high marks.

7. Dendritic drainage patterns

Refers to the drainage system in which the tributaries inter to the main river and form main river, or strong river. It seems like trees with its leafs. as follows:-



DENDRITIC DRAINAGE PATTERNS
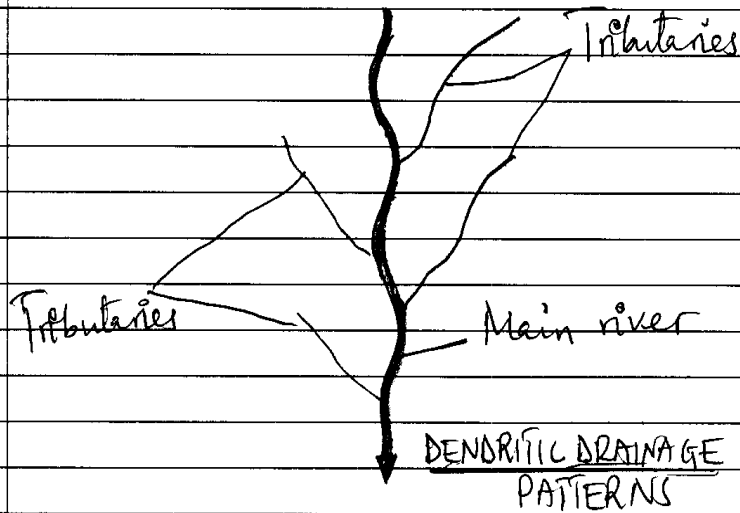
Trellis drainage patterns

This are the drainage patterns whose formed ~~oint~~ ninety degree (90°) to form a main river from the different tributaries through different parts in the land
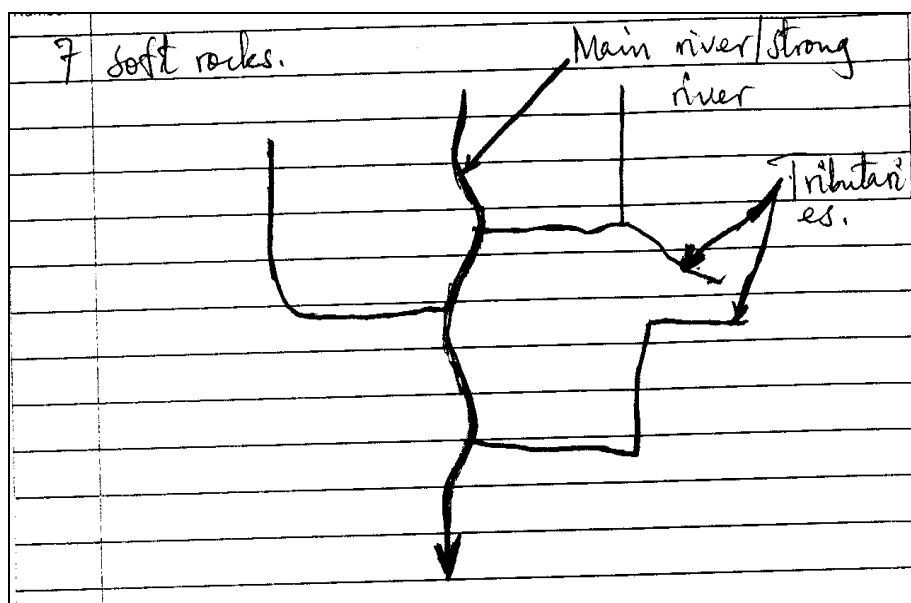
Extract 7.2: A sample of good response by one of the candidates.

In extract 7.2, the candidate managed to describe dendritic and trellis drainage patterns with the aid of diagrams. The candidate adhered to the demand of the question although in describing trellis drainage the candidate did not give the reason for the tributaries to enter the main river at 90 degrees. In his/her description, the ideas of the river traversing through the soft rock and therefore the river assuming definite angles was important.

### 2.1.8 *Question 8: Geography Teaching and Learning Resources.*

In this question, the candidates were required to write three advantages of using atlas in teaching and learning Geography subject. The analysis on candidates' performance revealed that, 66.46 percent scored 3 marks which is good performance and 27.13 percent scored averagely from 1.5 to 2.5 marks. Further analysis showed that, 6.41 percent of the candidates scored poorly from 0 to 1 mark. Out of these candidates, 1.52 percent of the candidates did not manage to provide correct responses and therefore scored 0 mark. The performance of candidates in this question is summarised further in Figure 8.
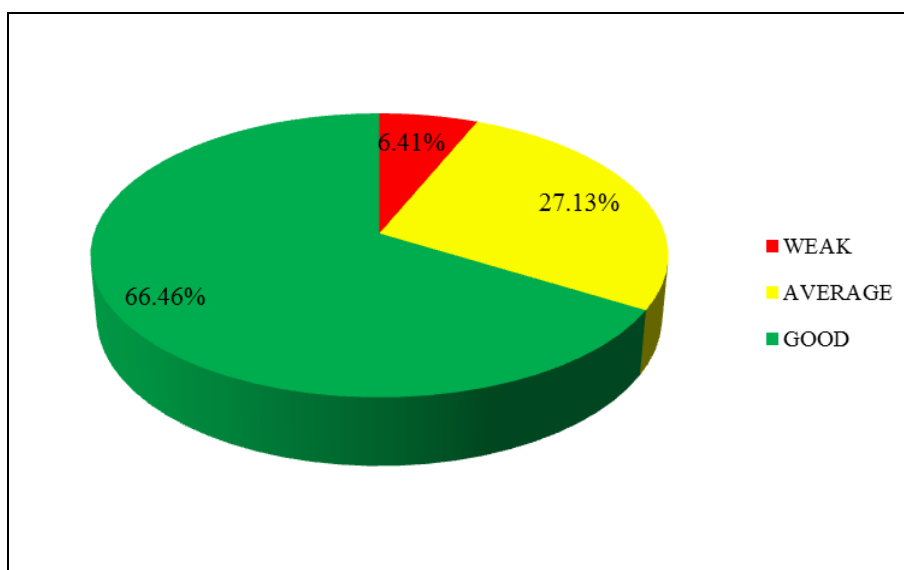
**Figure 8**: *Candidates' Performance in Question 8.*

Figure 8 shows that the, the performance of candidates in this question was good. This is signified by the 93.60 percent of the candidates who were able to score from 2 to 3 marks making this question among the well performed questions.

The analysis of data indicated that the candidates, who scored high marks demonstrated adequate knowledge of the advantages of using an atlas. They managed to outline three advantages of using an atlas book in the process of teaching and learning Geography. For example, one of the candidates in this category provided the following responses.

(i) *It simplify teaching and learning process, because atlas helps a teacher and students to be familiar with the distribution of natural resources of different areas*

(ii) *It motivate students, because atlas show different coloured features which found on the earth surface, this situation motivates learners*

(iii) *It enhances students' ability to keep permanent memory because atlas shows the location of different features on the earth surface through map and help learner to keep memory while learning..*

The candidates' scores in this group varied due to differences of clarity of the points outlined. However, the basic idea about the importance of using atlas was important to be identified in the candidate's responses in this category. Extract 8.1 illustrates another good response from one of the candidate's script who performed well in this question.



Extract 8.1: A sample of good response by one of the candidates.

In extract 8.1 the candidate was able to write the three advantages of using atlas in the process of teaching and learning of geography subject.

Furthermore, the 27.13 percent of candidates who scored from 1.5 to 2.5 marks (Average performance) had moderate knowledge on the subject matter. Although they understood the demands of the question, some candidates outlined one correct point and two partially correct points while others did not give the required number of points. Their scores varied depending on the correctness of the descriptions.

The analysis from candidates' responses indicated that the major reason for candidates to score from 0 to 1 mark was lacked knowledge of the subject matter particularly on the importance of using atlas book in teaching and learning Geography. For example, one candidate described the importance of using atlas during teaching and learning Geography. By giving the following responses; *it helps to show all natural resources when teaching and learning, it help to show all tourist areas located, it used of show things as reference book.* In the candidate's response the candidate in the first point stated generally what the atlas may show. However, it is not true that the atlas can show all natural resources. In the second and third points, the candidate again focuses on the phenomena which the atlas book can show instead of why it is important to use during teaching and

learning of Geography subject. Extract 8.2 represent a sample of another candidates' response who scored low marks.

| 9. | (i) U helps to Conceptualization. | |
| | (ii) U helps to preparation of lesson plan | |
| | (iii) U helps to preparation of Scheme of | |
| | work. | |

Extract 8.2: A sample of incorrect response by one of the candidates.

In extract 8.2, the first response of the candidate partially responds to the question. However, the other two responses are directed towards preparation for teaching and learning Geography which was not the focus of the question.

### 2.1.9 *Question 9: Assessment in Geography*

The candidates in this question were required to list five importance of multiple choice items in assessing students' achievement in Geography subject. The data analysis indicated that 44.00 percent of the candidates scored from 4 to 5 marks which is good performance and 49.09 percent scored moderately from 2 to 3.5 marks. Further analysis indicated that, 6.91 percent of the candidates scored from 0 to 1.5 marks signifying weak performance. Out of them, 0.71 percent were not able to provide any correct responses and therefore scored 0 mark. Figure 9 presents an illustration on the performance of candidates in Question 9.
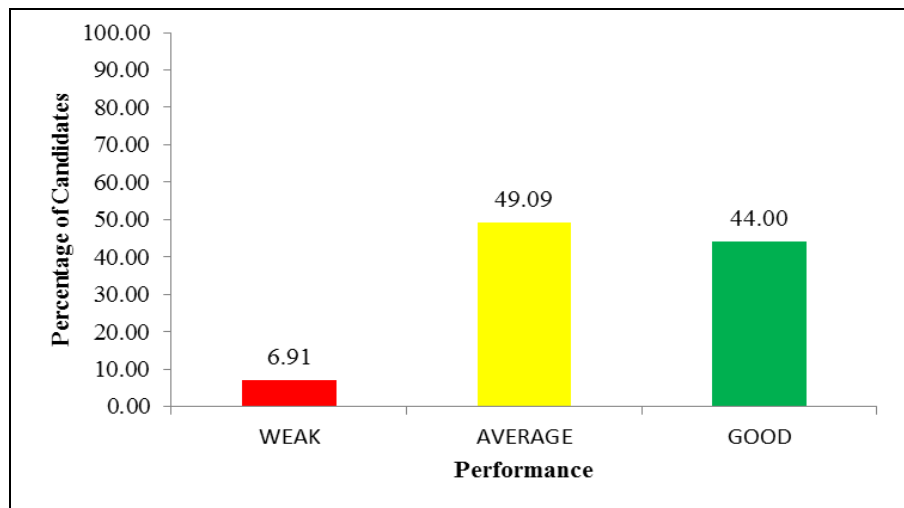
**Figure 9**: *Candidates' Performance in Question 9.*

The data analysis showed that the 44.00 percent of the candidates who scored from 4 to 5 marks demonstrated adequate knowledge of the importance of multiple choice items in assessing students' achievement in Geography subject. Majority of them managed to provide satisfactory answers for all points listed. For example, In responding to this question, responded as follows: *multiple choice easy to attempt, it covers large content areas, it's easy to mark, can be mark by anybody because doesn't require skills in marking, and can be constructed by using graph or diagrams where by develop skills of recalling to learners.* The deviation of the candidates' marks depended on the clarity of their responses. Extract 9.1 is a sample of another candidate who responded correctly to this question.

| 9 | The following are the importance of Multiple choice items in assessing students achievement in Geography subject as follows: |
|---|---|
| | i). It helps to cover large content domain of the subject matter. |
| | ii). It helps to avoid the hallo-effects as the teacher doesnot consider learners hand writing |
| | iii). It helps to measure how the learner knows the facts of a certain question. |
| | iv) It enables the learner to develop critical thinking |
| | v) It enables the teachers to measure an individual abilities of the learners in terms of speed and scoring questions. |

Extract 9.1: A sample of good response by one of the candidates.

The analysis further showed that, the candidates who scored average marks (2 to 3.5) had good understanding of the question. However, the candidate lacked sufficient knowledge about the importance of multiple choice items in assessing students' achievement. Some of the candidates in this category provided a mixture of correct and incorrect responses leading to scoring low marks. For example, one candidate gave the importance of multiple choice items as; *it helps to measure students' ability in answering questions; it is used to challenge learners; it is used to develop critical thinking to learners; it is used to measure students understanding of the question; it is used to measure.* In the above responses, the first and third points are correct but the rest are not clear. For example, it is not clear when the candidate writes that multiple choice items are *used to challenge students*. The candidate was also not clear when he/she wrote the importance of multiple choice items in the last point as *they are used to measure*. The candidate could have elaborated what the items measures. The fourth point "it is used to measure students understanding of the question" is basically the repetition of the first point. Other candidate gave responses which were untrue for example in one of the candidate's response; he/she claimed that multiple choice items are easy to construct which is not the case especially when all the rules are considered.

Further analysis of the candidates' performance showed that the candidates (6.91%) who scored low marks (0 to 1.5) had insufficient knowledge about the importance of multiple choice items in assessing students' achievement. Moreover, some of the candidates mixed relevant and irrelevant responses. Extract 9.2 is a sample of a response from a candidate with a low mark.



Extract 9.2: A sample of one of the candidate' incorrect response.

Extract 9.2 is an example of a candidate who provided irrelevant responses. The candidates associated the skills which multiple choice can be used to measure to refer to the skill that can be provided by multiple choice items. However, multiple choice items are items which can be used in an assessment tool and therefore they can only measure that skill but not providing them.

### 2.1.10 Question 10: Geography Teaching and Learning Resources

In Question 10 the candidates were required to explain three significances of using Geography text book in teaching and learning of Geography subject. Data analysis showed the performance of candidates in this question was good since 93.0 percent of the candidates scored 3 marks indicating good performance, 5.80 percent had average performance (scored from 1.5 to 2.5 marks) and only 1.73 percent of the candidates had weak performance (scored from 0 to 1) mark. These statistic make this question one of the questions which, the candidates' performance was good because while only 1.73 percent had a weak performance, the candidates with good performance were 92.47 percent.as illustrated in Figure 10.
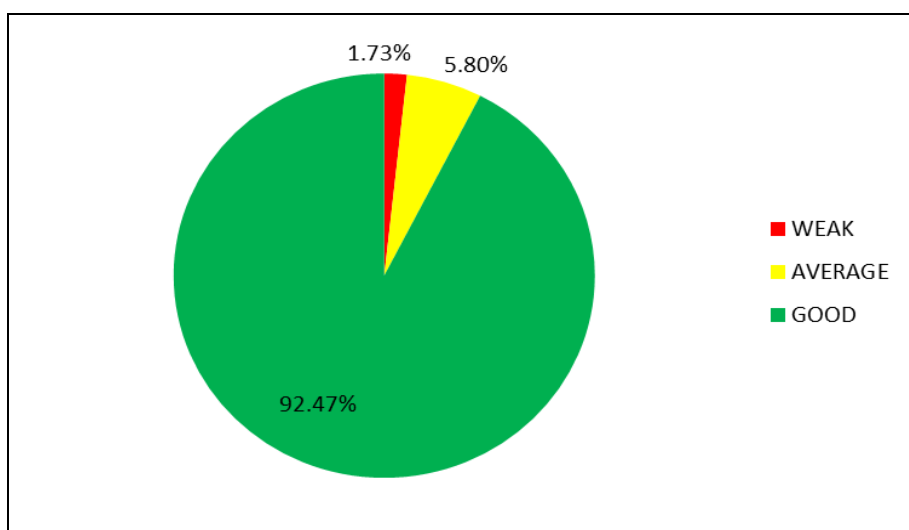
**Figure 10**: *Candidates' Performance in Question 10.*

The analysis of the candidates' responses in their answer scripts indicated that the 92.47 percent of candidates who scored higher marks (3) had adequate knowledge about the significance of Geography text book. The question was performed well by the candidates possibly because textbook are commonly used in curriculum implementation. Most of the candidates managed to point out three significances of using geography text book in teaching and learning of geography subject. for example, one candidates wrote;: "*it's used to prepare lesson notes for teaching and learning, it helps students to make reference for the examination and it help teacher to teach systematically and to be confident*". Generally, the variation of the candidates' scores in this category depended on the degree of relevancy and clarity of their responses. Extract 10.1 is a sample of such good responses.

> 10. i. It enables a teacher to teach in a systematic way by outlining the causes which the students are required to be taught over a specified period of time.
>
> ii/ Geography textbook enables/helps the students who missed up the lesson to cater up with the class. This means that if a certain student is absent in a certain lesson he/she can use a textbook to cater up with the teacher to the next lesson
>
> iii/ Geography textbooks provides different exercises which makes learners compitent with the lesson. A geography textbook do provide some excersises which learners are required to do and through this will enable them to be compitent with the lesson.

Extract 10.1: A sample of candidate's good response

The 5.8 percent of candidates who had average performance had insufficient knowledge about the importance of the textbook. It was however surprising because they used textbook even in their own learning. The provision of insufficient responses was an indication of a possibility that there were key words in the question which these candidates did not understand and hence they failed to understand the demand of the question.

The weak performance of the 1.73 percent of candidates was basically a reflection of lack of knowledge of the importance of the Geography text book in teaching and learning Geography. Most of the candidates in this category were able to give one correct response as shown in Extract 10.2.

> 10. i) Geography text book - provides lesson objectives of the content.
>
> ii) It show assessment procedures during teaching and learning process.
>
> iii) It has detailed information of the content decided in the syllabus in relation to level of class.

Extract 10.2: A sample of candidates' weak response.

In extract 10.2, the candidate provided one correct point that, the textbook has detailed information of the content. However, it is not correct that the text book gives the lesson objective. The lesson objectives are formulated by the teacher depending on the time scheduled for the lesson, the competencies in which the teacher wants to teach his/her learners. Assessment procedures are also developed by the teachers in order to determine the extent which the contents were able to understand.

## 2.2 SECTION B: Academic Contents

This section consisted of tree essay questions. The questions were optional which were set based on the Geography Academic Syllabus for Diploma in Secondary Education which was issued in 2009. The candidates were required to select and answer any two questions from this section. Each of the questions comprised a total of 15 marks.

The performance of candidates in each question in this section was also classified into three categories; weak, average and good based on the score range of. 0 to 5 marks, 5.5 to 10 marks and 10.5 to 15 marks respectively.

### 2.2.1 *Question 11: Population and Development*

In question 11, the candidates were required to analyse five factors which influence settlement in Tanzania. The question tested the candidates' knowledge about factors that influence the development of settlement in Tanzania. Data analysis shows that this question was opted by 929 (94.41%) candidates out of 984 candidate who sat for the Geography examination paper. Out of these candidates, 76.43 candidates scored from 10.5 to 15 marks which is a good performance. Similarly, 23.14 percent scored averagely from 6 to 10 marks and only 0.43 percent scored from 0 to 5.5 marks. The general performance in this question can be categorized as good because 99.4 percent of all the candidates scored 6 or above marks out of 15 allocated marks. Table 1 summarizes the candidates' performance.

**Table 1**: Candidates' Performance in Question 11

| SN | Total No of Candidates | Range of Scores | Percentage of Candidates (%) |
|----|------------------------|-----------------|------------------------------|
| **1.** | 5 | 0-5.5 | 0.43 |
| **2.** | 214 | 6-10 | 23.14 |
| **3.** | 710 | 10.5-15 | 76.43 |

The 76.43 percent of the candidates who scored from 10.5 to 15 marks were able to answer this question correctly by providing relevant introduction, relevant points in the main body and a relevant conclusion. The analysis from candidates' responses showed that the candidates had adequate knowledge of the factors that influence the development of settlements. For example, a response from one of the candidates in this category included points such as: *presence of social services in the area, good security, conducive climate and soil fertility* Other responses were: *"Science and technology, availability of infrastructure and established market,* These candidates also demonstrated good mastery of English Language which enabled them to communicate clearly and presented their points in good flow of ideas. Extract 11.1 is a sample of another candidate who responded sufficiently to this question.

| | |
|---|---|
| 11 | Settlement is the habitats of people in a cer |
| | tain area which can be found on a period of time |
| | Settlement development is an increase of par |
| | manent habitat of people in a certain area. |
| | There are various factors which influence settle |
| | ment development in Tanzania, so as people are |
| | settled at one place without moving from one pla |
| | ce to another. |
| | The following are five factors which influe |
| | nce settlement development in Tanzania:- |
| | Political stability, areas with peace |
| | and harmony influence people to settle in one |
| | place. In Tanzania there is no civil war and |
| | other conflict due to that there is political stabi |
| | lity which influence settlement development |
| | in Tanzania. For example in different areas li |
| | ke Dar es salaam in Tanzania, people are settle |
| | d and the settlement have been developed due |
| | to the presence of peace and harmony. |

| | | |
|---|---|---|
| | Presence of social services, also another factor is social services, like schools, hospitals, infrastructures due to the presence of social services influence settlement development. For example areas with no social services like schools and hospitals have shortage of settlements because people are ignored to live so as they can find good social services. | |
| | Good climatic condition, like enough rainfall, presence of all seasons like winter, summer not only unreliable rainfall like in the desert it can not be easy for settlement to be developed because of unfavourable climatic condition. | |
| 11. | Good transport and communication system, for example roads, networks also influence the settlement development. For example Dares salaam, Arusha, Mwanza and other places to rend in Tanzania. Due to the good notion that people can communicate, as well as transport their good that is also the factor influence the development of settlement. | |
| | Presence of fertile soil in various areas in Tanzania, because most of people are practicing much in agriculture as we know that is the backbone of our country the factor which also influence the development of settlement in Tanzania is fertile soil which help people to settle in one area and cultivate different crops for their benefits and benefits of other. | |
| | In general, stable political, presence of social services, presence of good land influence people to live in a certain area as well as to move from one place to another in order to settle in a certain area. | |

Extract 11.1: A sample of a candidate's good response

The candidates who scored from 6 to 10 marks had partial knowledge of the factors that influence the development of settlement in Tanzania. Their responses had several weaknesses. For example, some of the provided partial explanations to some of the points and others provided a mixture of correct points and incorrect one. For example, one of the candidates gave the following response as factors

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for the development of settlements; *Political stability, employment opportunity, good provision of Services, migration, gradient*. In the above provided points, the candidate gave migration as one of the reasons for development of settlement but he/she was supposed to explain the reasons/factors for migration of people from one place to another and establish settlements  The candidate was also not able to elaborate how gradient can be a factor for people to establish settlement. Other candidates also provided fewer points than they were required in the question. The degree of correctness of the candidates' responses differed, thus some of them scored higher marks than others.

The analysis of the candidates' performance suggested that a few (0.43%) candidates who scored low marks (1 to 5.5) were unable to answer correctly the question. The reason behind the candidates' poor performance in this question was insufficient knowledge on the factors that influence the development of settlement in Tanzania. Further analysis from the candidates' responses showed that, some of the candidates provided irrelevant introduction and they mixed correct and incorrect responses on the factors that influence the development of settlement in Tanzania. Others nested incidences of the same point and presented them as five different points.   As shown in Extract 11.2.

11   Factors which influence settlement development in Tanzania.

        Settlement refers to the geographical distribution of people a in a place. settlement has two types as a se urban to rural or rural to urban settlement. The following are the factors influencing settlement development in Tanzania:

        Good health services; such as the hospitals services facilitate the development of settlement in Tanzania this is due to the fact that people can move from one place to another for health services, so this factor lead to the development of settlement in Tanzania

        Availability of employment opportunities also Influence the development of settlement since a lot of people preferable a place which have good employment opportunities. so also this is another factor.

        Availability of enough markets; due to the settlement, the market is the main factors for settlement development in Tanzania as people can make their trade and get money to afford their needs.

        Population control; this means that some families use family planning to control population increase, so due to this there is low problem in population as m people can control it. so this lead to the development of settlement in Tanzania

        Good education services; In the system of education, this lead to the settlement

1)   development as it helps the people to get knowledge about settlement and how to control population for the settlement development in Tanzania.

        Generally; the settlement in Tanzania has been the major things to the development of a country becaus a place of high settlement can not be developed economically, socially and even politically.

Extract 11.2: A sample of a candidate's incomplete responses.

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In extract 11.2 the candidate had good understanding of the requirement of the question. However, he/she limited his/her discussion to social services as the major determinant of the development of settlements.

### 2.2.2 *Question 12: Population and Development*

In this question, the candidates were required to assess five impacts of population growth on forest resources. The question was opted by 650 (66.05%) of all the candidates who sat for the Geography examination paper. The data analysis showed that, 121(36.23%) candidates scored from 10.5 to 14.5 marks 184 (55.09%) candidates scored from 6 to 10 marks and 8.68 percent scored poorly below 5.5 marks. The performance in this question was good since 91.32 percent of all the candidates who opted for this question scored from 6 marks and above out of 15 allotted marks. The 6 marks sugggest that the candidate was able to attain at least 40 percent correct responses in the question which is the lowest pass mark. Figure 11 illustrates further the performance of the candidates in this question.
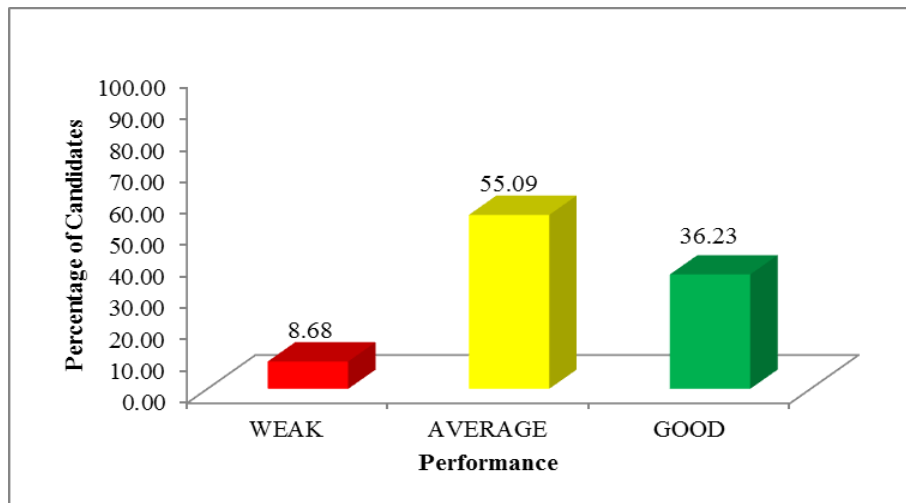


**Figure 11**: *Candidates' Performance in Question 12.*

The review of candidates' responses in their answer scripts showed that the the 36.23 percent of candidates who scored high marks (10.5 to 14.5) had adequate knowledge on the impacts of population growth on forest resources. Most of the candidates provided sufficient explanation which indicated that, the candidates had adequate knowledge of the topic in general and possibly some experience on

the impact of population on forest resources which are visible in Tanzania such as the expanding semi-arid areas due to deforestation.

Furthermore, most of the candidates from this category demonstrated good skills in essay writings as they provided appropriate introduction, main body and a conclusion. The points which were presented most as impacts of population growth on forest resources included points such as: *deforestation, soil erosion, shortage of rainfall, loss of biodiversity and the decline of tourist activities*. The quality of the responses in this category however differed. Some of the candidates were not able to exhaust all the required points leading to their variation in scores. Extract 12.1 represents a sample of responses from a candidate who answered the question sufficiently.

| 12. | Population growth refer to the increase in the number of people in a certain area. Forest resources are all products or things produced and obtained from the forest for human use, example Timber, fire wood, charcoal, and fruits, also medicine. The p. Increase in population has impacts on the forest resources, as explained below. | |
| | Expansion of agricultural activities. Due to population growth, the needs of agricultural products is also increased, This make the farmer to need a large area for cultivation, so they tend to clear forest so as to farm. This cause deffrestation of the forests, Thus affects forest resources. | |

Expansion of settlements. As population is grow also the settlement area is expanded. Expansion of settlement is associated with clearing of land for construction purposes. This can lead to cutting down of trees so as to get new area for settlements. Thus affecting forest resources.

Demand for fuel and energy is increased. The energy source or fuel which is most used especially in developing country like Tanzania, is charcoal and fire wood, so increase in their demand may destruct the forest resources. Because both charcoal and fire wood are product of resources forests, so when there is high need of them, means there is high need to cut cut as much trees as possible hence cause defforestation.

Increase demand for building materials like timber, and furniture. Also growth of population make people to demand the building materials so as to establish settlements. Such building materials are obtained from forest especially timber, so timber harvesting may affect forests.

12.    Increase in bush fire problem. This happens when people clear the area for vegetation and settlements, they tends to burn the cleared grasses and trees, if the fire in not well controlled it may erupt or spread or escape to the forest hence may cause burning of forest. This is due to impact of population growth which increase demand of soil for agriculture and forest.

Therefore, the growth of population is highly associated with environmental especially forest impacts. This is due to the fact that, when population is increased it lead to the increase in demand of resources, especially forest resources.

Extract 12.1: A sample of candidate's good response.

In extract 12.1, despite of some grammatical errors in his/her essay, the candidate was able to present the impacts of population growth on

forest resources. This indicates that the candidate understood the demand of the question and was knowledgeable of those impacts which made him/her focused in answering the question

Further analysis showed that the candidates who scored from 6 to 10 marks (average performance) were able to understand the demands of the question. However, such candidates gave insufficient explanations to the points they raised. Some candidates in this category just outlined the points without sufficient explanations and others provided fewer points contrary to the demands of the question. In this category, there were also candidates who repeated the same points in different words. All these factors lead to this category of candidates to score moderate marks (6 to 10 marks).

Moreover, most of the candidates (8.68%) who scored from 2.5 to 5.5 marks had insufficient knowledge about the impacts of population growth on forest resources. Thus, they were unable to answer the question exhaustively. In addition, some of the candidates did not adhere to essay writing skills and lacked English Language proficiency. This led to their unclear presentation of ideas. Apart from that, other candidates did not understand the demand of the question which led to such candidates to give responses which were not related to the question. This phenomenon is a reflection of two possibilities. The first possibility is that the candidate quickly rushed into attempting the question without reading it critically and hence leading to such candidate to provide responses which were not related to the question. The second possibility is that the candidates did not understand some of the key words in the question which led to such candidates to respond contrary to the demands of the question. These possibilities are concluded because the responses of most candidates who scored low marks were written in sufficiently good English language which means the candidate can understand most of the texts. Extract 12.2 is a sample of a candidate's who scored low marks.

12. Population growth, is increase in number of people in the environment. The following are the impacts of population growth on forest resources.

Development of town and city, this means that the population growth on forest resources it can lead to the development of town and city because different people we can clear the forest in order to get the area for set tlement so this action or this process it can lead to the development of town and city.

Improvement of infrastructure, Also this me ans that the growth of population on fore st resources it can lead to the improveme nt of infrastructure due to the increa se of the number of people in the environment for different activitie s with different purpose.

Overutilization of natural resources, This means that the population growth on fore st resources it can lead to the overutilizati on of natural resources in different en vironment to different people due to the population growth in forest resour ces in the environment.

Development of trade due to differe nt investors, This means that due to po pulation growth on forest resources it lead to the development of trade due to different investors were conducting different activities on the environme nt like others they want to produce

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Extract 12.2: A sample of a candidate's poor response.

In Extract 12.2 the candidate misunderstood the question and hence described the importance of population growth to the development of a place instead of impacts of population growth on forest resource. Such responses indicate that the candidate did not properly read and understand what he/she was supposed to do.

### 2.2.3 *Question 13: Energy Resources*

In this question, the candidates were required to explain five factors that hinder harnessing of hydroelectric power in East Africa. The question tested candidate's knowledge of the types of energy resources and the challenges in harnessing such energy resources.

The question was opted by 706 (71.74%) of all the candidates who sat for the Geography examination paper. Out of those, 47.45 percent scored from 10.5 to 15 marks, 51.47 percent scored from 5.5 to 10 marks and. 1.13 percent scored from 0 to 5 marks, The general performance in this question can be categorised as good because out of the 706 candidates, 697 (98.87%) were able to score within the pass mark range from 5.5 to 15 marks. This makes this question one of the well-performed questions compared in the Geography paper. Table 2 presents the statistical performance of the candidates in this question.

**Table 2**: **Performance of Candidates in Question 13**

| SN | Total No of Candidates | Range of Scores | Percentage of Candidate (%) |
|---|---|---|---|
| 1. | 8 | 0-5 | 1.13 |
| 2. | 362 | 5.5-10 | 51.42 |
| 3. | 335 | 10.5-15 | 47.45 |

The analysis showed that the 335 (47.45%) candidates who opted for this question scored high marks. The candidates in this category had adequate knowledge of energy resources and particularly the factors that hinder the harnessing of hydroelectric power in East Africa. Most of these candidates understood well the demand of the question and demonstrated good essay writing skills as they managed to provide appropriate introduction, main body and conclusion. These candidates were able to explain factors that hinder harnessing of hydroelectric power in East Africa with vivid examples. The correct responses discussed by most candidates in this category included points such as; *low level of science and technologies, shortage of skilled labour, poor government support, poor infrastructure system and financial problem.* However, some of the candidates could not manage to exhaust all the required points and others provided relevant points but failed to give sufficient elaborations to some of the points. This led to the variations of their scores. Extract 13.1 shows a sample of a good response from one of the candidates.

Flooding of the rivers and dames; Most river during the rainy season becomes flooded by water which leads to destructions of machines and other equipments for generating of power; As the it is difficult to control floods during the rainy period this hinder the production of the power, all machines are fully covered with water and difficult to rotate for production of power.

Therefore; East African countries should Cooperate towards the harnessing of Hydro-electric power by providing fund and experts to one or two countries which have power stations and that power produced can be used by all member of the Community rather than each country to harness the power itself; this would be difficult forever to meet the reliable productions of this hydroelectric power.

13  Shortage of skilled labours; The technicians and engineers who capable of running machines in Hydroelectric power station still is problems. As the programmes need people who experts to run the system and provides maintainance where necessary for reliable power generated.

Seasonal rivers and dams; Most rivers are seasonal, this means water become fully during the rainy season and volume of water decreases during the dry season hence do not support harnessing of Hydroelectric power as water do not sufficient to run the machines setted.

Flooding of the rivers and dames; Most river during the rainy season becomes flooded by water which leads to destructions of machines and other equipments for generating of power; As the it is difficult to control floods during the rainy period this hinder the production of the power, all machines are fully covered with water and difficult to rotate for production of power.

Extract 13.1: A sample of a candidate's good response.

In extract 13.1 the candidate discussed the factors that hinder harnessing of hydroelectric power in East Africa. The candidate was able to provide the required points and managed to explain how those factors were a hindrance to the harnessing of hydroelectric power in East Africa. This led to the candidate to score good marks.

Further analysis of candidates' performance showed that, 51.42 percent of the candidates who scored average marks (6.5 to 10 marks) had partial knowledge about the factors which hinder the harnessing of hydroelectric power in East Africa. Some of the candidates provided appropriate introduction and conclusion. They also managed to provide relevant points though they failed to give adequate clarifications. Further analysis showed that some of the candidates misunderstood the demand of the question while others outlined points without any explanations. This led to such candidates to score low marks. Those weaknesses led them into scoring average marks. The difference of their scores depended on the number of points provided and the clarity of their explanations.

Furthermore, the analysis indicated that no candidate score 0 mark. However, the 1.13 percent of the candidates who had a weak performance scored from 3 to 5 marks due to various reasons. One the reason was inadequate knowledge of the subject matter particularly lack of knowledge about the factors that hinder harnessing of hydroelectric power in East Africa. The second reason for poor performance was failure to understand the requirement of the question which led to such candidates to provide irrelevant answers. Candidate

in this category also exhibited lack of English Language skills which made them unable to express clearly or defend the points they were raising. One of the candidates, for example, provided factors for land degradation instead of the factors that hindered harnessing of hydroelectric power in East Africa. Some of the incorrect responses from one of the candidate were; *"through deforestation, poor method of agriculture, poor fishing method, overgrazing and through mining activities"*. Extract 13.2 is a sample of another candidate's response who scored poorly.

Presence of enough capital; this mean that when urban want to harnessing hydroelectical power it must have enough capital which used to inversity much on this project which used to pay salar for labours and buying instrum of which support this project.

Presence of labours work; this mean when wants to construct to harnessing hydroelectric power must have labour power who may support for making different activities which support the growth and continuity of distribution of hydroelectric power in different area in East Afrzacan

13. Presence of water fall; also may hinder the harnessing of hydroelectric power because its water fall may faccilitate the occurance of water. forexample river Zambazi water fall, Ildzungws fall those may used to increase its amount of water which used to push the electricity for distribute for different area.

Presence of electricity faccilities; this may hinder the harnessing of hydroelectric power because electricity faccilities may support to push electricity forexample its heavy machine which may collect waves to generate electricity so through this to elect hydroelectric power may formed and harnessed as well as may distributed for different uses.

Generally hydroelectric power power are important because through hydroelectric power may provide employment, it increase the lip standard of the people as well as in general hydroelectric power may support much in development of East Afrza nations.

Extract 13.2: A sample of a candidate's incorrect response.

In extract 13.2 the candidate misconceived the demand of the question by providing factors which are necessary for establishing a hydroelectric power instead of explaining the factors which hinder the harnessing of hydroelectric power. His/her presentation does not reflect how the factors he/she raised are a hindrance; rather he/she presented the factors as if they were necessary for harnessing hydroelectric power. The candidates responses indicate that the candidate did not understand the key word "hinder" leading to his/her discussion to centre on the conditions necessary for establishing a hydroelectric power in East Africa.

## 2.3 SECTION C: Pedagogy Contents

This section consisted of tree optional questions set based on the Geography Pedagogy Course Syllabus for Diploma in Secondary Education which was issued in 2009. Each of the questions in this section had a total of 15 marks. The candidates were required to select 2 questions out of the three given questions.

Candidates' performance of in each question in this section was also classified into three categories; weak, average and good based on the score range of. 0 to 5 marks, 5.5 to 10 marks and 10.5 to 15 marks respectively.

### 2.3.1 *Question 14: Geography Discipline*

In this question, the candidates were required to critically examine five factors which support the statement that "Geography subject is multidisciplinary". A total of 617 (62.70%) candidates attempted this question. The analysis of data indicated that 38.25 percent scored from 10.5 to 15 marks which is a good performance, 46.03 percent candidates scored averagely from 5.5 to 10 marks and 15.72 percent scored poorly from 2 to 5 marks.. Table 3 illustrates the candidates' performance in Question 14.

**Table 3**: **Candidates' Performance in Question 14**

| SN | Total No of candidates | Range of scores | Percentage of Candidate (%) |
|----|------------------------|-----------------|------------------------------|
| 1. | 97 | 0-5 | 15.72 |
| 2. | 272 | 6.5-10 | 56.03 |
| 3. | 236 | 10.5-15 | 38.25 |

The analysis of the 38.25 percent of candidates who performed well were able to give sufficient reasons to defend the statement that Geography is a multidisciplinary subject. The candidates were able to give appropriate introduction of Geography as multidisciplinary subject and were able to support their points of view using points such as: *relationship between geography and mathematics, geography and chemistry, geography and economic, geography and history, geography and physics.* However, the clarity and relevance of their explanation led to the variation of their scores. Extract 14.1 is a sample of the candidate with relevant responses.

| | |
|---|---|
| 14 | Geography is the branch of science which deal wilt the study of human activities related wilt his of her environment. There are three branches of geography these are human and economic geography, practical geography and physical geography. Practical geography deal wilt statistics, maps, survey, research and photography. human and economic geography deal wilt agricultural, tourism, fishing, turm Timber industry and mining activities. The following are the factor which support the statement that "Geography is multidisciplinary". These factor are hh. Geography and matt ematics, Thus relationship between matte matics and geography occured iu population studying of population distribution iu statistics. Thus bolt involve quantitative approach to study statistic content. |

| 14 | Geography and chemistry, Geography subject is multi disciplinary because it relate with chemistry subject. pollution and decomposition of organic and non organic matter are found in geography and chemistry. For example in pollution. The pollution like air pollution caused by industrial activities which ~~prog~~ produce gases like Carbondioxide methane and ~~eto~~ chloroflowcarbone which are found in both chemistry and geography. |
|---|---|
| | Geography and economic, The geography subject is multidisciplinary ~~sub~~ because it relate with economic. Thus in studying human activities in geography such as agricultural activities industrial activities and mining activities, it relate with economic by giving economic contribution of these activities such as increase personal and national income, employment opportunity and reduce the ~~burd~~ burden of the government which lie both in geography and economic. |
| | Geography and history, Thus geography subject is multidisciplinary because it relate with history subject. History is the ~~&~~ record of past event. in studying geography some content should be kept record such as geology of age which are recorded to show |

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Extract 14.1: A sample of a candidate's good response.

In extract 14.1, despite some English language grammatical errors, the candidate examined five factors which support the statement that "geography subject is multidisciplinary". In his/her responses the candidate was able to show how Geography is related to other subjects (disciplines) and hence its multidisciplinary nature.

On the other hand, the candidates' responses indicated in Table 3 demonstrate that the majority (56.03%) of the candidates performed averagely in this question. The main reasons for the candidates' average performance were: partial knowledge of the candidates about the nature of Geography subject. The candidates were able to give some correct reasons to explain why Geography is a multidisciplinary subject. Others gave fewer points that required by the question and some could not sufficiently defend their explanations.

Further analysis indicates that a few candidates (15.75%) who opted for this question had inadequate knowledge about the factors which support the statement that geography subject is multidisciplinary. Additionally, some were not able to provide relevant introduction while others provided irrelevant main body and conclusion. Extract 14.2 illustrates one of the poor responses in this question.

| | |
|---|---|
| 14 | Geography. Is the branch of science which deals with the study of distribution the spatial distribution of both man made feature and natural features. Geography it enable people to know the orignal of the earth continent. The following are the factors which support that geography subject is multi disciplinary which are. |
| | Geography it enable people to know the climate condition in the certain place. Geographer may understand the en climate f culture en in the cortain area in the world world through studying geography. Example of climate eg are eqritorial equatory, Savanna and desert climate. |
| | Geography it enable to know the orginal of the landscap. Through studying at geography it enable learners and geographer teacher to know the orginal at the land according to the structure. Example land which are founded on the opposite coastal region are equal with features. |
| | Geography It enable to know the process of soil formation. Through studying geography subject it enable learners and teacher to know on how the soil its formed, Example geography it enable learner to and teacher to know the process of soil formation such as parent rock, living organism, relief, time and organic matter. It enable teachers and learner to know the location of thing on the world. Geo- |

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Extract 14.2: A sample of a candidate's incorrect response.

In extract 14.2, the candidate tried to explain subject matter of Geography but without explaining why it is a multidisciplinary subject. The candidate also had difficulties in expressing him/herself in the English Language.

### 2.3.2 *Question 15: Preparation for Teaching and Learning Geography*

Question 15 demanded the candidate to describe five strengths of using field trip method in the process of teaching and learning Geography. The question was selected by 863 (87.70%) of the candidates who sat for the Geography examination paper. Data showed that only 0.46 percent of the candidates had weak performance (from 0 to 5.5 marks), 63.85 percent scored averagely from 6 to 10 marks and 35.69 percent had a good performance as they scored from 10.5 to 15 marks. The general performance of candidates in this question can therefore be categorised as good because 99.54 percent of the candidates were able to score within the pass mark range from 6 to 15 marks. Table 4 illustrates further the candidates' performance in question 15.

**Table 4*:* Candidates' Performance in Question 15**

| SN | Total No of candidates | Range of scores | Percentage of Candidate (%) |
|----|----|----|----|
| **1.** | 4 | 0-5 | 0.46 |
| **2.** | 551 | 6.5-10 | 63.85 |
| **3.** | 308 | 10.5-15 | 35.69 |

The analysis of the candidates' responses indicates that candidates who scored higher marks (10.5 to 15) adhered to the demand of the question and had adequate knowledge of the concept of field trip as a method of teaching and learning geography. The candidates managed to describe five strengths of using field trip method in the process of teaching and learning Geography. The candidates also showed good essay writing skills. They were able to write coherently by writing appropriate introduction, main body and a suitable conclusion. However, the clarity and relevance of their explanation led to the variation of their scores. Extract 15.1 is a sample of a good response in this question.

Extract 15.1: A sample of candidate's good response.

The analysis of candidates' response in their answer scripts indicated that, the candidates who performed averagely, (6 to 10) marks had partial knowledge of the subject matter. Some of them provided less than five points which were required by the question. Other candidates in this category mixed correct and some incorrect points. The above reasons lead to the variation of candidates' response and so were their scores.

In extract 15.1, the candidate managed to describe five strengths of using field trip method in the process of teaching and learning Geography. The candidates managed to explain the strengths of field trip method such as its ability in "… *facilitating learning by doing, enabling students to have permanent memory, motivating students to learn actively, enhancing competence to students and its effectiveness in teaching and learning process*".

Furthermore, it was found that, the major reason for poor performance of the 0.46 percent of the candidates who scored poorly from 0 to 5.5 was misunderstanding of the question. When the candidates' responses were examined it was evident that, the candidates for some

reasons rushed into attempting the question without clearly understanding its requirement. This led to such candidates to provide points related to field trip but which did not address the question. Hence, they were not relevant and therefore led to low scores.

| | | |
|---|---|---|
| 15. | Field trip, math is the method used in teaching and learning geography it can be through moving or traveling from one place which is school to the field place for the purpose of teaching and learning into a certain topic. The following are strength of using field trip method in process of teaching and learning Geography. | |
| | Prepare the topic, before going to the field trip a teacher should prepare a topic which is relevant to the place where the trip is going to take place, for example if the topic is about weather and weather station the field trip should be conducted to the area with availability of weather station for example in Kilimanjaro International Airport there is availability of weather station. | |
| | Preparation of the students, also during the field trip a teacher should make the- | |

15. enough preparation to his or her student whereby if the field trip will be conducted far from school show students should be well prepared interms of money and enough materials.

Availability of transport and communication system, also inorder to conduct a field trip there should have availability of transport and communication system which can facilitate the field trip method to be conducted without any quarial.

Organization of materials, during the field trip also a teacher should make an organization of all materials used in teaching and learning Geography for example availability of syllabus, scheme of work, lesson plan, lesson notse, text book this can influence teacher to reache in specific goal on time, and have an ability of time management

Permission letter from the head of the school, also for or inorder to conduct a field trip method of teaching and learning Geography a subject teacher should have the permission letter for from his or her headmaster, inorder to be identified to the place where they are going.

Generally, the use of field trip method in teaching and learning Geography is very important, because it brought about the influence of motivation of learning to the learner, also it create long term memory to the learner.

Extract 15.2: A sample of a candidate's incorrect response.

Extract 15.2, is an example of a response from a candidate who did not understand properly the requirement of the question. Instead of explaining the strengths of using field trip method in teaching and learning Geography, the candidate explained the procedures of conducting a field trip which was not the requirement of the question.

### 2.3.3  *Question 16: Principle of Teaching and Learning Geography*

In question 16, the candidates were required to examine how inquiry mind can be developed to the learners by giving five points. The question was opted by 483 (49.1%) of all the candidates who sat for the Geography examination paper. The performance in this question can be categorised as good, since 25.88 percent had a good performance as they scored from 10.5 to 15 marks. 46.38 percent scored from 6 to 10 marks and 27.74 percent scored from 0 to 5.5 marks.  This makes 72.26 percent of the candidate who scored within the pass mark range of 6 to 15 marks as illustrated in Figure 12.
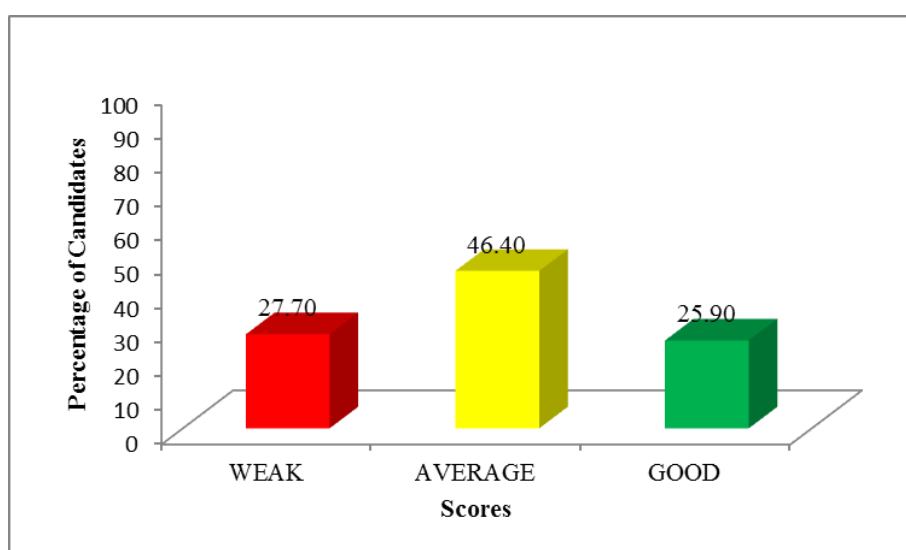


**Figure 12**: *Candidates' Performance in Question* 16.

The analysis of candidates' scripts showed that the candidates who scored from 6.0 to 10 marks (average performance) demonstrated partial knowledge of the subject matter particularly on how the inquiry mind can be developed to the learners. Their scores differed from one candidate to another due to clarity of their answers for each point given. Some of the candidates provided partial explanations to correct points while others explained few points than the points which were required in the question. In some points, instead of explaining how inquiry can be developed, the candidate explained the importance of using enquiry method in teaching and learning Geography.

The candidates who scored 10.5 to 15 marks (good performance) had good knowledge on how to develop inquiry mind to the learners and were able to understand the demands of the question. Their responses were characterized by detailed explanations, logical flow of ideas with good essay writing skills. However, the differences in their ability to organize, clarify the responses with relevant examples resulted into differences in their scores. Extract 16.1 is a sample of good response from part of the candidate's script.

| | |
|---|---|
| Generally; inquiry mind to learners are very important to the teachers and the students themselves on tackling different immediately geographical phenomenas like social problems and students physiological and psychological problems. | |

Extract 16.1: A sample of a candidate's good response.

In extract 16.1, the candidate explained how the inquiry mind can be developed to learners by providing responses such as; *through investigations, creativity and curiosity, through questions and answers, through practical activity through observation and self-expression*. The candidate also showed good essay writing skills as he/she wrote an introduction which related to the question and argued logically in his/her points relating them to the key requirement of the question and finally wrote an appropriate conclusion.

The candidates who scored from 0 to 5.5 marks (weak performance) had limited knowledge on how inquiry mind can be developed to the learners. Some of the candidates for example, managed to provide relevant introduction with some few correct points without a conclusion. Others candidates misunderstood the question. Instead of explaining how inquiry mind can be developed to learners, they explained the benefits to the learners of using the inquiry approach during teaching and learning. Some candidates wrote responses about inquiry but lacked clarity and therefore it was difficult to understand what they intended to present. Further analysis showed that most of the candidates in this category had poor English Language skills. Extract 16.2 is a sample of a weak response from one of the candidates.

16. Inquiry, this is refers to the process of asking for the information. The inquiry mind can be developed to the learners due to the following:

It prepare learners for studying, This means that the inquiry mind can be developed to the learners because it help to prepare learners for studying during teaching and learning process.

Increase intention to the learners, Also this means that the inquiry mind can be developed to the learners because during teaching and learning process in it help to increase intention to the learners in the teaching and learning process.

Promote critical thinking to the learners, Also this means that the inquiry mind can be developed to the learners during teaching and learning process because it help to promote critical thinking to different learners during teaching and learning process.

It create long term memory, This means that during teaching and learning process the inquiry mind can be developed to the learners because during teaching and learning process it help to creat long term memory.

To improve knowledge, Also this means that in the process of teaching and learning process the inquiry mind can be developed to the learners because it help to improve knowledge to different learners during teach

16. teaching and learning process.
   Therefore, the process of asking in the classroom to different learners it is very important because it help the different learners to expend their knowledge during teaching and learning process.

Extract 16.2: A sample of candidate's unsatisfactory responses.

In extract 16.2, the candidate provided elaborations related to what inquiry does to the learners when used during the teaching and learning process instead of explaining how inquiry can be developed to learners. The candidate provided points such as: *prepare learners for studying, promote critical thinking to learners, it creates long term memory, and to improve knowledge.* These were however not the expected points since the question focused on how to develop inquiry to the learners. Hence the provided responses were irrelevant to this question.

## 3.0   PERFORMANCE OF CANDIDATES IN EACH TOPIC

The analysis of candidates' performance in each topic was done by computing the percentage of candidates who scored 40 percent or higher in each of the questions which were set from that particular topic. Average percentages of candidates with such performance were computed to determine the average performance in the topic. The performance of candidates in a topic was rated weak or poor if only 33% or less of the candidates averaged 40 percent or higher in the questions set from that topic. The performance was moderate(average) if more than 33 percent of the candidates averaged 40 Percent or higher in the questions set from that topic otherwise the performance was good if more than two third (more than 67%) of the candidates averaged 40 percent or higher in all the questions set from that topic.

The analysis of the candidates' performance in DSEE 2020 showed that candidates had good performance in 9 out of the 10 assessed topics. The candidates had the highest performance in the topic of *Geography Teaching and Learning Resources* (95.93%), followed by equally good performance in

the topics of *Population and Development* (95.44%), Assessment in Geography (93.09%), Energy *Resources (87.80%)*, *Principles of Teaching and Learning Geography (85.90%)*, *Geography Discipline (84.28%), Environmental Problems and Issues (82.62%)*, *Human Occupations and Economic Development (79.57%)* and *Geomorphic Processes (74.22%)*. The performance was moderate (average) in only one topic namely, *Physical Resources (41.81%)*. The Good performance in these topics was mainly attributed to candidates' wide knowledge of the subject matters, their ability to provide responses which conformed to the demands of the questions and the ability to present the responses clearly in English language.

The average performance was chiefly a result of insufficient responses to the question (question 3) which required candidates' knowledge especially in the topic of *Physical Resources*. Most of the candidates (27.4%) were not able to provide a single correct response to the questions while other provided partially correct responses or a mixture of few correct responses which led to scoring low marks. Other candidates also exhibited insufficient language skill which made them fail to communicate their ideas clearly which consequently led to scoring poorly.

## 4.0   CONCLUSION

From the analysis of candidates' performances it can be concluded that the performance of candidates in the Geography examination in the DSEE 2020 was good. When rated based on the percentage of candidates who were able to score 40 percent correct responses in a question, the performance in 14 questions out of the 16 questions forming the Geography examination paper was good. The performance was weak only in one question (question 7) where the percentage of candidate who scored 40 percent or higher was only 31.71 percent. When the same criterion is used, the performance was average also in one question (question 3) which had 41.81 percent of candidates who scored 40 percent or higher correct responses in that question.

In general, the factors which led to good performance include candidates' adequate knowledge in different topics, good communication skills particularly in English language, ability of candidates to adhere to the demands of the questions and good essay writing skills. Weak performance on the other hand was a result of lack of knowledge in different topics, misconception of the questions, insufficient essay writing skill and poor English language skills. It was impressive however, to notice that, all the

candidates who sat for the Geography examination passed the examination. This implies that, while they did not do well in some questions. They performed well in other questions and therefore the general performance was relatively good.

It was also impressive to notice that the performance was average only in one topic (Physical Resources) and good in the rest of the topics. This implies that the teaching of Geography in Teacher's Colleges is carried out effectively.

## 5.0    RECOMMENDATIONS

Although the performance in the subject was good, in order to improve further the performance of candidates in future examinations, the following are recommended.

(a)    Student-teachers should be encouraged to read widely from different resources; such as books, journals, pamphlets and online materials for them to be knowledgeable on different geographical facts. Reading widely will also help the student-teachers to improve their English Language proficiency and essay writing skills.

(b)    It was observed that the performance of candidates was lowest in two questions set based on two topics; question 3 which was set based on Physical Resources and question 7 which was set based on Geomorphic Processes. It was further noted that the performance in these two topics was lower than the rest of the topics. It is recommended that, Tutors should continue using more participatory approaches in teaching these topics such as field study in order to give the student-teachers experiential knowledge of the content in these topics.

(c)    It was also found that, some candidates lacked essay writing skills which led to scoring low marks. It is recommended that, tutors should introduce the practice of sharing samples of good essay written by other student-teachers to encourage the rest of the student-teachers to develop good essay writing skills. Other strategies which improve communication skills such as debates among the student-teaches should also be encouraged in colleges.

(d)    It was also revealed that some candidates misconceived the questions which led to candidates giving irrelevant responses. This can be

associated to lack of concentration on the part of the candidates or failure to understand key words in the questions. It is recommended that student-teachers should read widely to improve their vocabulary to resolve the problem of misconceptions of the questions. They should also be advised to read the questions carefully during examinations to avoid rushing which leads to answering questions contrary to the requirement of the questions.

# SUMMARY OF THE CANDIDATES' PERFORMANCE IN GEOGRAPHY SUBJECT

| S/N. | Topic | Question Number | Performance in Each Question (%) | Average Performance Per Topic (%) | Remarks |
|------|-------|-----------------|----------------------------------|-----------------------------------|---------|
| 1. | Geography Teaching and Learning Support Resources | 8 | 93.60 | 95.93 | Good |
| | | 10 | 98.27 | | |
| 2. | Population and Development | 11 | 99.57 | 95.44 | Good |
| | | 12 | 91.32 | | |
| 3. | Assessment in Geography | 9 | 93.09 | 93.09 | Good |
| 4. | Energy Resources | 1 | 76.73 | 87.80 | Good |
| | | 13 | 98.87 | | |
| 5. | Principles of Teaching and Learning Geography. | 15 | 99.54 | 85.90 | Good |
| | | 16 | 72.26 | | |
| 6. | Geography Discipline | 14 | 84.28 | 84.28 | Good |
| 7. | Environmental Problems and Issues | 2 | 82.62 | 82.62 | Good |
| 8. | Human Occupations and Economic Development | 5 | 79,57 | 79.57 | Good |
| 9. | Geomorphic Processes | 4 | 92.58 | 74.22 | Good |
| | | 6 | 98.37 | | |
| | | 7 | 31.71 | | |
| 10. | Physical Resources | 3 | 41.81 | 41.81 | Average |