



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



**CANDIDATES' ITEM RESPONSE ANALYSIS
REPORT ON THE CERTIFICATE OF SECONDARY
EDUCATION (CSEE), 2022**

FOOD AND NUTRITION



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051 FOOD AND NUTRITION

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FOREWORD

This report presents Candidates' Items Response Analysis (CIRA) on Certificate of Secondary Education Examination (CSEE), in the Food and Nutrition subject, which was conducted in November 2022. This report aims to provide feedback to all educational stakeholders on the factors that contributed to the candidates' performance in Food and Nutrition subject.

The Certificate of Secondary Education Examination (CSEE) is a summative evaluation which intends to assess candidates' learning to provide feedback that teachers, students and other educational stakeholders can use to improve teaching and learning respectively. This analysis shows justification for the candidates' performance in the Food and Nutrition subject. The candidates who attained high scores had adequate knowledge of the subject, high ability to understand the demands of the questions and sufficient practical skills. However, candidates who scored low marks faced difficulties in responding to the questions due to their insufficient knowledge of the tested concepts, inability to understand the demand of the questions and insufficient practical skills.

This report will help candidates to identify strengths and weaknesses for them to improve learning before sitting for their Certificate of Secondary Education Examination (CSEE). It will help teachers to identify the challenging areas and take appropriate measures during teaching and learning.

The National Examinations Council of Tanzania (NECTA) expects that the feedback provided in this report will highlight the challenges which education stakeholders should take proper measures to improve teaching and learning the Food and Nutrition subject.

The Council appreciates the contribution of all those who prepared this report.



Dr. Said Ally Mohamed
EXECUTIVE SECRETARY

1.0 INTRODUCTION

The report analyses the candidates' performance on the Food and Nutrition Theory Paper for the Certificate of Secondary Education Examination (CSEE) done in November 2022. The examination measured competencies according to the 1997 Home Economics syllabus. The topics assessed in the paper were *The Expectant Mother, Good Grooming, Food Preservation, Staple Foods, Floor and Floor Coverings, Public Health Services, Kitchen and Food Hygiene, Laundering in the Home, Food and Nutrition, Early Marriage, Children Ailments, Family Roles and Relationship, Pastry, Milk and Milk Products, Fish, Meal planning, Appetizers, Reheated Food and Catering.*

According to the CSEE 2022 results, 2319 (99.36%) of the candidates sat for the Food and Nutrition paper, out of whom 2297 (99.83%) passed. Further analysis of the results indicates that 78 (3.39%) scored A; 662 (28.77%) scored B; 1444 (62.76%) scored C; 113 (4.91%) scored D and 4 (0.17%) scored F. Thus, their overall performance was good because the majority scored average marks or above. The candidates' performance in the year 2022 has slightly decreased by 0.13 per cent from the performance in 2021.

The analysis of the candidates' performance on each question is categorized into three groups. It is regarded as good if the scores range from 65 to 100 per cent and is denoted by the green colour. The performance is regarded as average if the scores range from 30 to 64 per cent and is denoted by the yellow colour. It is regarded as weak if the scores range from 0 to 29 per cent and is indicated by the red colour.

This report provides feedback on the performance of the candidates by showing what they were required to do as well as their strengths, weaknesses and reason(s) for their responses. Tables, graphs charts, and extracts from the students' scripts are inserted to illustrate the reported information.

This report consists of four sections. Section One introduced the report, Section 2 analyzes the candidates' performance on each question; Section 3 analyzes the candidates' performance per topic and Section 4 provides the conclusion and recommendations.

2.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE ON EACH QUESTION

The examination paper had 11 questions. Section A consisted of two (02) questions; Section B consisted of seven (07) questions; and section C consisted of two (2) questions. In Section A, Question 1 carried ten (10) marks whereas Question 2 carried five (05) marks. Question One comprised ten (10) multiple choice items, and Question Two consisted of five (5) items for matching. In Sections B, each question carried ten (10) marks while each question in Section C carried 15 marks. All questions in Sections A and B were compulsory while Section C the candidates were required to answer only one question in.

2.1 Question 1: Multiple Choice Items

The question consisted of 10 items that were set from ten topics, namely *The Expectant Mother, Good Grooming, Food Preservation, Staple Foods, Floors and Floor Coverings, Public Health Services, Kitchen and Food Hygiene, Laundering in the Home, Food and Nutrition* and *Early Marriage*. The candidates were required to choose the correct answer among the given alternatives by writing its letter in the answer booklet provided.

The question was attempted by 2319 candidates. Of whom 206 (8.9 %) scored from 0 to 2, 1761 (75.9 %) scored from 3 to 6 and 352 (15.2%) candidates scored from 7 to 10 marks. Figure 1 summarizes the candidates' performance on this question.

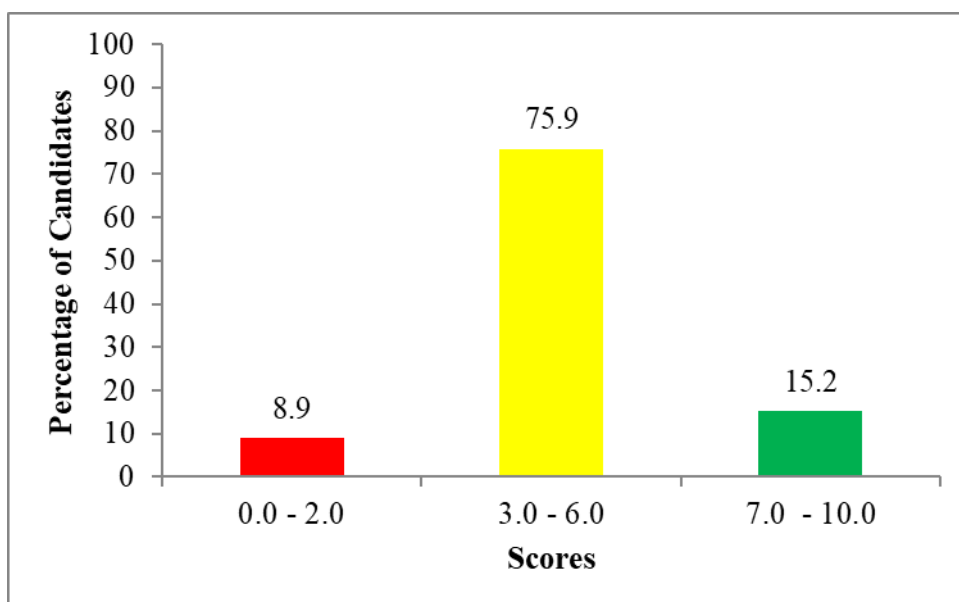


Figure 1: *Candidates' Performance on Question 1*

The candidates' general performance on this question was good because 91.1 per cent of them scored average marks or above. Those with good performance had adequate knowledge of the contents covered in the items and understood the demands of the question. Hence they provided the correct answers to most parts of the question.

However, 0.6 per cent of the candidates failed to choose any correct response to items (i) – (x); hence, they scored zero. These candidates demonstrated insufficient knowledge of most of the topics that were assessed in this question.

The following is the analysis of candidates' responses to each item assessed in Question 1 (i-x).

Item (i) was set from the topic of "The Expectant Mother." The candidates were asked as follows:

Which of the following is a dangerous sign during pregnancy?

- A Persistent heart burn
- B Lack of enough sleep
- C Frequently urinating
- D Suffering from nausea
- E Severe headache

The correct answer was *E Severe headache*. The candidates who chose the correct answer knew that severe headache is one of the dangerous signs during pregnancy as it indicates the sign of anaemia (low haemoglobin). The candidate who chose distractors *A Persistent heart burn*, *B Lack of enough sleep* and *C Frequent urinating* did not understand that these are the late signs of pregnancy. Moreover, those who selected *D Suffering from nausea* did not understand that nausea is a sign of the early stage of pregnancy.

Item (ii) was set from the topic of “Good Grooming.” The candidates were asked as follows:

Why is it advisable to use perfumed soap when bathing?

A To maintain body odour

B To kill germs on body skin

C To remove body odour

D To take out body perspiration

E To moderate sweating

The correct answer was *C to remove body odour*. The candidates who chose the correct answer were aware that perfumed soap has a good fragrance which masks the body odour. The candidates who chose distractors *A To maintain body odour* and *E To moderate sweating* were not familiar with function of perfumed soap. They were not aware that perfumed soaps do not moderate body odour or sweat but mask body odour. The candidate who chose distractor *B To kill germs on body skin* were not aware that not all soaps are antiseptics. Those who chose *D to take out body perspiration* confused the function of soap with that of deodorant. The deodorant is the one that takes out body perspiration and not body odour.

Item (iii) was set from the topic of “Food Preservation.” The candidates were asked as follows:

Which of the following preservative method is a modern method of preserving fish?

A Smoking

B Salting

C Canning

D Frying

E Drying

The correct answer was *C Canning*. The candidate who chose correct answer had adequate knowledge about food preservation. They understood that canning is done by modern machine whereby the food is filled in cans; the air is removed; and the cans are sealed. The candidate who selected distractors *A Smoking*, *B Salting* and *E Drying* did not understand that these are traditional methods of preserving food by applying the principle of removing water. Those who chose distractor *D Frying* were mixing food preservative methods with cooking methods.

Item (iv) was set from the topic of “Staple Foods.” The candidates were asked as follows:

From the following list of cereals, which set comprises the types of rice?

(a) Brown rice

(b) White rice

(c) Rice paper

(d) Rice flour

(e) Polished rice

A (b), (c) and (d)

B (a), (b) and (e)

C (a), (b) and (c)

D (b), (d) and (e)

E (a), (c) and (e)

The correct answer was *B (a) Brown Rice (b) White rice and (e) Polished rice*. The candidates who chose the correct answer understood cereals, especially the types of rice. Those who selected distractors *A (b), (c) and (d)* and *D (b), (d) and (e)* failed to differentiate rice flour from rice grain. They did not understand that rice flour can be obtained from any type of rice after milling. Moreover, those who selected distractors *C (a), (b) and (c)* and *E (a), (c) and (e)* did not understand that rice paper is edible food wrapping paper, and it can be used on baked items that stick to the baking sheet.

Item (v) was set from the topic of “Floor and Floor Coverings” The candidates were asked as follows:

Why wooden floor should be polished regularly

A To improve the appearance

B To improve wash ability

- C To make it smoother*
- D To give a dark colour*
- E To make it soft and cool*

The correct answer was *A To improve the appearance*. The candidates who chose the correct response understood that hardwood floors tend to lose their appeal after a certain period if they are not properly and regularly maintained. The candidates who chose distractor *B To improve wash-ability* and *C To make it smoother*, failed to understand that these are the results of polishing the floor and not the aim of polishing the wooden floor. The candidate who selected distractor *D to give a dark colour* did not know that polishing does not change the colour of the wooden floor; rather, it enhances its appearance. Those who chose for distractor *E to make it soft and cool* were not aware that polishing does not make the wooden floor soft or cool.

Item (vi) was set from the topic of “Public Health Services.” The candidates were asked as follows:

Which one is the aim of rendering public health services to the community?

- A To ensure that families get treatment facilities free of charge*
- B To ensure that there is an equal number of children in each family*
- C To facilitate safe health living provided within the family*
- D To make sure that non-communicable diseases are eradicated*
- E To assist families in taking measures to avoid home accidents*

The correct response was *D To make sure that non-communicable diseases are eradicated*. The candidates who chose the correct response had sufficient knowledge about *Public Health Services*. The candidates who selected distractor *A To ensure that families get treatment facilities free of charge* failed to understand that most of these services are not free of charge. The candidates who selected for distractor *B To ensure that there is an equal number of children in each family* were not aware that *Public Health Services* provide family planning education to ensure that each family plans the number of children to have. Those who selected distractors *C To facilitate safe health living provided within the family* and *E To assist families in taking measures to avoid home accident* did not understand that these are not the aim of rendering public health services to the community.

Item (vii) was set from the topic of “Kitchen and Food Hygiene.” The candidates were asked as follows:

The following diagram represents kitchen equipment which is used for



- A Draining vegetables after washing*
- B Sprinkling oil and fat on cooked bread rolls.*
- C Scattering oil on baking tin before baking.*
- D Grating orange skins to obtain fine rinds.*
- E Dusting the work surface when rolling pastry.*

The correct answer was *E Dusting the work surface when rolling pastry*. The candidates who chose the correct response were knowledgeable about the use of the flour dredger. Those who selected distractor *A Draining vegetables after washing* confused the use of the flour dredger with that of the colander. Moreover, those who chose distractors *B Sprinkling oil and fat on cooked bread rolls* and *C Scattering oil on baking tins before baking* did not know about the use of the pastry/basting brush. Those who chose *C* confused the uses of the flour dredger without knowing that the response was talking about scattering oil and not flour. Likewise, those who opted for distractor *D Grating orange skins to obtain fine rinds* were not knowledgeable about the use of the zester. Their responses implied that these candidates had inadequate knowledge about kitchen utensils. The following diagrams show kitchen utensils whose uses have been described in responses A, B and D: the use of colander is represented in option A; that of the pastry/basting brush is represented in option B; and the use of the zester is represented in option D.



Colander



Pastry/basting brush



Zester

Item (viii) was set from the topic of “Laundering in The Home.” The candidates were asked as follows:

Which among the following are the functions of bleaches?

- (a) They can be used as disinfectants on surfaces.*
- (b) They absorb the yellowish colour of surfaces.*
- (c) They give glossy and shiny finishing to the surface.*
- (d) They are used in removing stains on the surfaces.*
- (e) They are used to dissolve and remove mucus.*

A (a) and (c)

B (b) and (d)

C (c) and (e)

D (a) and (d)

E (b) and (c)

The correct answer was *D (a) and (d)*. The candidates who chose the correct answer had adequate knowledge about laundering in the home. They understood that many bleaches have broad spectrum bactericidal properties, making them useful for disinfecting and sterilizing. They were aware that bleaches are used to remove color (i.e, whitening) from a fabric or fiber and to clean or to remove stains via bleaching. The candidates who chose the wrong responses had inadequate knowledge about laundering in the home, especially about bleaching agents.

Item (ix) was set from the topic of “The expectant Mother.” The candidates were asked as follows:

Which set of actions can be done to prevent and treat obesity?

- (a) Eating meal that contains plenty of fibre*
- (b) Eating a lot meal that contains sugar and fat*
- (c) Eating snacks that are not energy rich*
- (d) Minimizing the consumption of alcoholic beverages*
- (e) Doing physical exercise regularly*

A (b), (c), (d) and (e)

B (c), (d), (e) and (a)

C (d), (e), (a) and (b)

D (e), (a), (b), and (c)

E (a), (b), (c) and (d)

The correct answer was *B (c) Eating snacks that are not energy rich (d) minimizing the consumption of alcohol beverages, (e) Taking physical exercise regularly, (a) Eating meals that contains plenty of fibre*. The

candidates who chose the correct response knew that obesity can be prevented by minimizing the intake energy rich food but eating food containing plenty of fibre. They understood that obesity can be prevented/treated by doing physical exercise regularly. The candidates who chose the incorrect responses did not know the measures to take in order to prevent obesity.

Item (x) was set from the topic of “Early Marriage.” The candidates were asked as follows:

Which among the following is a factor which may encourage early marriage?

- | | |
|------------------------------------|--|
| <i>A Dropping out of school</i> | <i>D Failure to achieve family goals</i> |
| <i>B Psychological immaturity</i> | <i>E Irresponsible sexual behaviour</i> |
| <i>C Female Genital Mutilation</i> | |

The correct answer was *E Irresponsible sexual behaviour*. The candidates who opted for the correct response were aware of the factors which can lead to early marriages. They understood that irresponsible sexual behaviour leads to early pregnancy and early marriage. The candidate who chose distractor *A Dropping out of school* confused the consequence of bad manners with the factors contributing to early marriages. The candidate who chose distractors *B Psychological immaturity* and *D Failure to achieve family goals* confused the factors leading to irresponsible sexual behaviours with those leading to early marriages. The candidates who chose distractor *C Female Genital Mutilation* failed to understand that, these are among the bad traditional practices which can contribute to the spread of HIV/AIDS.

2.2 Question 2: Matching Items

This question was set from the topic of “Children’s Ailments.” It required the candidates to match facts about diseases in List A with their corresponding types of diseases in List B by writing the letter of correct response beside the item number in the answer booklet provided.

LIST A	LIST B
(i) <i>The disease causes rashes appear on the face and later spread to other parts of the body.</i>	A Chicken pox B Diphtheria
(ii) <i>The disease caused by a parasite called itch mite that causes itching between the toes.</i>	C Measles D Mumps
(iii) <i>The disease causes death due to suffocation if the patient is not early treated.</i>	E Poliomyelitis F Scabies
(iv) <i>The disease caused by a germ found in the soil to which animal waste has been thrown.</i>	G Tetanus
(v) <i>The disease that causes swelling of glands below the ear which later spreads forwards and downwards.</i>	

This question was attempted by 2319 candidates. Of whom, 1321 (57.0%) scored from 0 to 1; 817 (35.2%) scored from 2 to 3; and 181 (7.8%) scored from 4 to 5 marks. Figure 2 illustrates this performance.

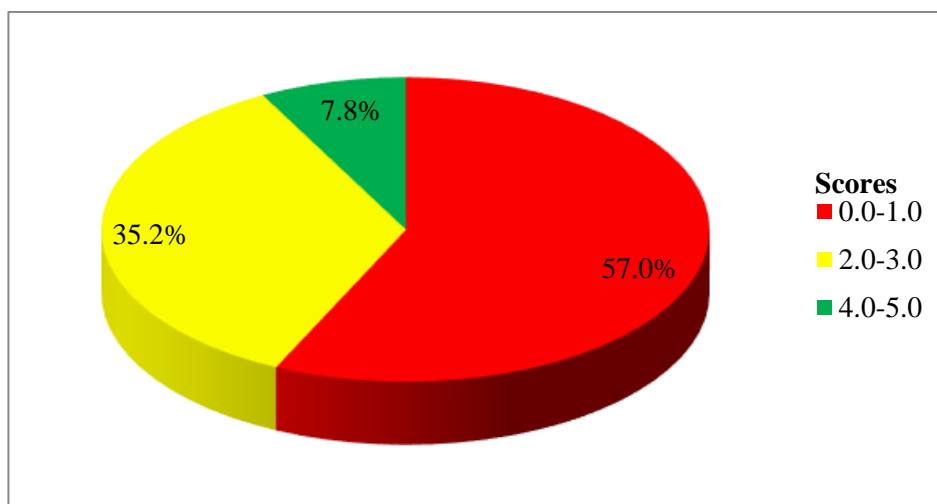


Figure 2: *Candidates' Performance on Question 2*

The candidates' performance on this question was average because 43 per cent scored 2 marks or above. The candidates who performed well had sufficient knowledge about children's ailments. Moreover, they correctly matched the types of diseases listed in B with the stated disease fact in List A.

Conversely, 57 per cent of the candidates scored low marks. These candidates failed to attempt most of the items included in this question. This performance was attributed to their inadequate knowledge about children's ailment. The analysis of the candidate's performance on each item is as follows:

The correct answer to item (i) "The disease causes rashes appear on the face and later spread to other parts of the body" was *C Measles*. The candidates who scored well in this item understood that measles had many symptoms; among them can cause rashes on the face which later spread to other parts of the body. Those who failed to match this item correctly were not knowledgeable about the symptoms of measles.

The correct answer to item (ii) "The disease caused by parasites called itch mite that causes itching between the toes" was *F. Scabies*. The candidates who performed well on this item understood that itching between the toes is caused by an infestation of the itch-mite parasite in the human body. Moreover, they understood that itching is one of the many symptoms of scabies, which include fever, blisters filled with pus and a dry skin. Those who failed to match this item correctly, had inadequate knowledge about the symptoms of scabies.

The correct answer to item (iii) "The disease causes death due to suffocation if the patient is not early treated" was *B Diphtheria*. The candidates who performed well on this item understood the effect of diphtheria. They were aware that diphtheria causes death because, as the patient complains of sore throat, breathing becomes heavy and rapid. As a results a patient suffers from suffocation and may die if medical attention is not sought early. The candidates who failed this item did not understand that suffocation in diphtheria patient can cause death if not treated.

The correct answer to item (iv) "The disease caused by a germ found in the soil to which animal waste has been thrown" was *G tetanus*. The candidates who performed well on this item understood that tetanus is caused by a germ found in the soil with animal wastes.

The correct answer to item (v) "The disease that causes swelling of glands below the ear which later spreads forwards and downwards" was *D Mumps*.

The candidates who performed well on this item understood that mumps affects the parotid glands and salivary glands which are located below and in front of the ears. The disease spreads through infected saliva. Those who failed to match this item correctly had insufficient knowledge about the sign and symptoms of mumps and other related diseases.

The candidates who performed well on this question seemed to have acquired adequate knowledge about different diseases such as chicken pox, diphtheria, measles, mumps and scabies.

2.3 Question 3: Family Roles and Relationship

In this question the candidates were tested on family roles and relationship. They were asked as follows:

- (a) *Describe briefly, four factors influencing the decision making in the family.*
- (b) *Explain three social cultural factors that influence the spread of STI's and HIV/AIDS in the family.*

The question was attempted by 2319 candidates. Of whom, 398 (17.2%) scored from 0 to 2.5; 1290 (55.6%) scored from 3.0 to 6.0; and 631 (27.2%) scored from 6.5 to 10 marks. The candidates' performance on this question is summarized in Figure 3.

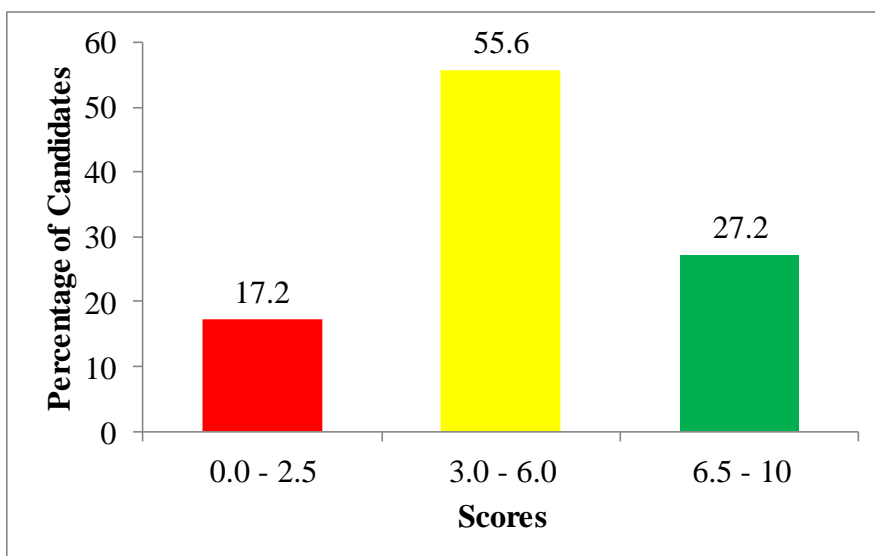


Figure 3: *Candidates' Performance on Question 3*

Figure 3 shows that the general performance on this question was good because 82.8 per cent of the candidates scored 3 marks or above. This shows that the candidates had sufficient knowledge about “Family Roles and Relationship.”

In part (a), the candidates with good performance demonstrated adequate knowledge of the factors influencing decision making in the family. They also seemed to have appropriate practical experiences gained from their family issues in decision making. Hence, the majority of them provided correct responses such as *age, family stability, economic status and level of education*. Others wrote *sex, ignorance, customs beliefs, traditional beliefs*.

Similarly, in part (b), the candidates who performed well had sufficient knowledge of the social cultural factors that influence the spread of STIs and HIV/AIDS in the family. This was justified in their responses as they correctly explained factors such as *marrying more than one wife, wife inheritance, and female genital mutilation*. Others wrote *widow inheritance, having many wives, circumcision and early marriage, and forced marriage*. Extract 3.1 shows a sample of the correct responses to Question 3.

03	<p>a) Factors influencing decision making in the family</p> <p>i. Gender, is the social relationship between males and female. Mostly male acts as primary decision maker in a family.</p> <p>ii. Age, Age is considered, simply because an elder can make a wiser decision compared to young man. Thus, Age is considered as factors for decision making.</p> <p>iii. Economic status of a person, mostly in African society a wealthy person or rich person is given much priority in making decision compared to a person who has do not have high economic status.</p> <p>iv. Education level, Also, education level is consider simply because some matters like Female circumcision, Wife inheritance needs a person who acquire good education compared to an ignorant one.</p> <p>v. Social cultural factors, Includes polygamy, in this social cultural practices requires a man to make decision to both of his wives.</p>	
3. b.	<p>i. Female Genital Mutilation (Female circumcision). This involve removal of either part of female reproductive organ which is known as clitoris. This influence HIV/AIDS simply because it involves sharing of sharp tools during circumcision and the use of unsterilized tools during circumcision can spread HIV/AIDS (Acquired Immune Deficiency Syndrome).</p> <p>ii. Polygamy, If one among wives is infected with HIV/AIDS can cause spread to husband, other wives as well as to children. Thus polygamy marriages results and influence HIV/AIDS.</p> <p>iii. Wife inheritance, This is an act of inherit a wife of dead husband who passed away. This influence spread of HIV/AIDS simply because if the wife had HIV/AIDS infected by her deceased husband can lead to spread of HIV/AIDS to man who will inherit her.</p>	

Extract 3.1: A Sample of the Correct Responses to Question 3

Extract 3.1 shows that the candidate correctly gave the factors that influence decision making in a family. The candidate also gave the correct explanation about the factors influencing the spread of STIs and HIV/AIDS.

Despite the good performance on this question, analysis indicates that 398 (17.2%) of the candidates scored weak performance in this question. Some of these candidates misinterpreted the demand of the question in part (a); hence, they provided irrelevant responses. For instance, instead of writing the factors influencing decision making, one of the candidates wrote history-related concepts such as the effects of slave trade and the causes of African underdevelopment. Such responses were *fear and insecurity, civil war, social problems and crime*. Another candidate gave the consequences of bad manners like early pregnancy, school dropout and death. Furthermore, others wrote *respect, education, motivation, team work, low number of family members, bad behaviour, poor housing condition, fighting, urban migration, laziness, corruption, poverty, bad behaviour, and peace and love in the family*. These responses did not address the demand of the question. Accordingly, these candidates had inadequate knowledge about the factors influencing decision making in the family.

In part (b), the majority of the candidates misinterpreted the demand of the question as they wrote ways of transmitting HIV/AIDS instead of the social cultural-factors that influence the spread of STIs and HIV/AIDS in the family. Their responses were *sexual intercourse, sharing blood with person who is affected with HIV AIDS, sharing partners, prostitution, unsafe sexual intercourse and peer pressure groups*. A few candidates provided irrelevant responses to the question due to their inadequate knowledge of the subject matter. Their responses were *lack of education, poverty, lack of decision, and bride price*. Such incorrect responses lead them to score less than the marks allotted to this question. Extract 3.2 is illustrative of the weak responses.

3	@ Factors for of the decision making in the family	
	i) Relationship of family	
	ii) Failure to mother family good	
	iii) Stress	
	iv) Separation of family	
	b) i) Sharing of shape object i because their sharing of shape	
	and object is factor that influenced the spread of HIV/AIDS -	
	a man have the cotton and used have the HIV and the person have	
	the HIV/AIDS so that not sharing the shape object.	
	ii) To sex without the food taboos	
	iii) Early marriage	

Extract 3.2: A Sample of the Incorrect Responses to Question 3

In Extract 3.2, the candidate provided irrelevant responses to both parts (a) and (b). In part (b), the candidate misinterpreted the demand of the question as he/she wrote ways of HIV/AIDS transmission.

2.4 Question 4: Pastry

This question measured the candidates' knowledge about pastry. It asked as follows:

- Outline three characteristics of a good quality pastry.
- State four rules for making pastry.
- Why pastry may become hard and tough after baking? Give three reasons.

The question was attempted by 2319 candidates. Of whom, 1030 (44.4%) scored from 0 to 2.5; 999 (43.1%) scored from 3 to 6; and 290 (12.5%) scored from 6.5 to 10 marks. The candidates' performance on this question is summarized in figure 4.

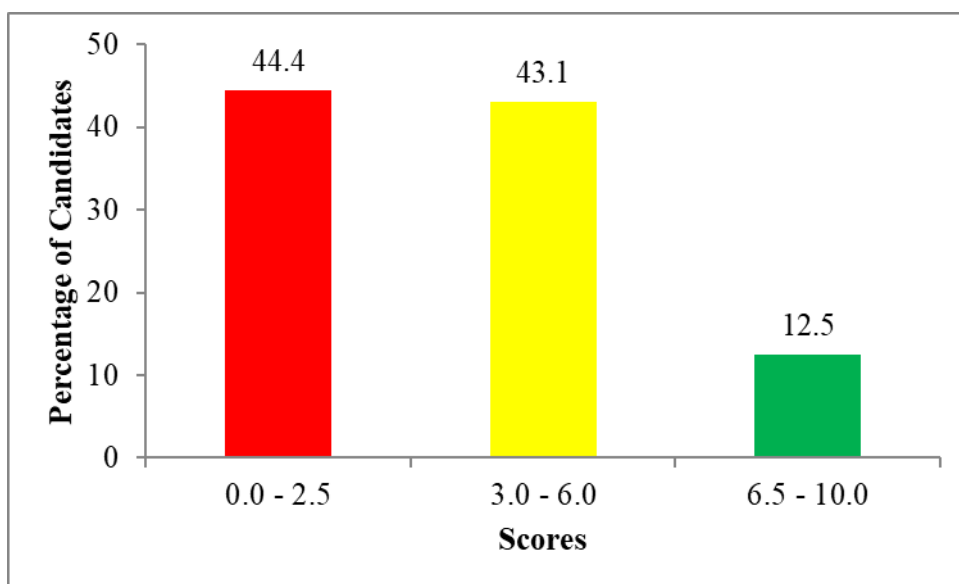


Figure 4: *Candidates' Performance on Question 4*

Figure 4 shows that the candidates' performance on this question was average because 55.6 per cent of candidates had average performance or above.

The analysis indicates that 7 (0.3%) of the candidate scored all 10 allotted marks. These candidates correctly outlined the characteristics of a good quality pastry in part (a). Their responses were *good quality pastry should have flakes layers, cuts easily with a fork, should have good flavour, should be light, and should have good appearance.*

In part (b), the candidates correctly outlined the rules for making pastry as they wrote: *Keep everything as cool as possible before handling the pastry; utensils and ingredients should be kept cool; handle lightly during kneading to ensure no gas is escaping; use an adequate amount of water according to the type of pastry prepared, example much in puff but less in suet pastry; use enough and little flour during rolling but, also do not stretch over and over the pastry or turn it over and over during rolling; introduce as much air as possible; bake in a hot oven; and roll out the pastry in one direction to avoid air to escape.*

In part (c), the candidates gave the correct reasons as to why pastry may become hard and tough after baking. They understood that over kneading the dough, incorrect proportion of the ingredients, incorrect fat use, too cool oven or too warm ingredients may cause pastry to become hard and

tough. Their responses were *incorrect amount of water used during pastry preparation, less fat used during the preparation of pastry, incorrect amount of flour, wrong proportional of flour may cause pastry to become tough and hard, the pastry was baked in a very cool temperature, too much handling of the pastry*. Such responses indicated that the candidates had sufficient knowledge of making pastry as illustrated in Extract 4.1.

04	a) I. It should be crisp	
	II. It should be flaky	
	III. It should be light	
	b) I. Make everything as cool as possible	
	II. Introduce as much air as possible	
	III. Use only enough flour to roll pastry in order to avoid pressing	
	IV. out of air	
	V. Bake in a hot oven	
	c) I. Too much handling	
	II. Baking in a cool oven	
	III. Use of many flour during rolling.	

Extract 4.1: A Sample of the Correct Responses to Question 4

In Extract 4.1, the candidate managed to provide correct answers to all parts of the question and scored full marks.

Despite the average performance obtained on this question, further analysis shows that 321 (13.8%) of the candidates scored zero. These candidates misunderstood the requirement of the question in part (a). Hence, they provided irrelevant responses. For instance, one candidate wrote: *so as to bring good taste, good taste must contain all ingredients, and should be soft*. Another candidate wrote *should contain little fat, should have a good circle appearance, the dough should be soft and not hard*.

In part (b), some of the candidates with weak scores misinterpreted the question and provided irrelevant responses. Their responses were *The dough should be soft; when rolling one direction should be applied; Moderate temperature should be applied when cooking; the use of required raising agent*. Yet, other candidates wrote the procedures for making pastry such as *collect all ingredients; put all ingredients in a dish; and prepare a dough which have right ingredients; cut the dough into different shapes when dough have already prepared; save it into a safe way* instead of giving the rules of making pastry.

Moreover, the candidates with weak performance on part (c) misunderstood the demand of the question. For instance, one of these candidates wrote *chemical to mixture, the raising agent to be in the pastry, and the mixture one direction*. Another candidate wrote *when heated or baked there is some layer that are broken down and caused the pastry to become tough after baking*. However, these responses were not correct. Other candidates skipped this part. Extract 4.2 shows a sample of the weak responses to this question.

4 a i)	have the colour good colour to cooked	
ii)	have the shape and man have the appetit to eat	
iii)	we use the raising agent like air	
b i)	Frying	
ii)	baking	
iii)	Roast Grilling	
iv)	Roasting	
c i)	The chemical to mixture	
ii)	The raising agent to be in the pastry	
iii)	The mixture one direction	

Extract 4.2: A Sample of the Incorrect Responses to Question 4

In Extract 4.2, the candidate provided irrelevant responses to all three parts of the question. Thus, lost all the marks allotted to this question. This shows that the candidate had insufficient knowledge about pastry making.

2.5 Question 5: Milk and Milk Products

The question measured the candidate's competence in milk and milk products. It asked as follows:

- (a) (i) *Why does milk scorch at the bottom of the pan when boiled?*
(ii) *How does the problem in 5(a) (i) be overcome?*
- (b) *Milk has a tendency to curdle when mixed with acidic ingredients, explain two ways of tackling this problem.*
- (c) *Briefly explain five guidelines of storing milk in absence of refrigerator.*

The question was attempted by 2319 candidates. Of whom, 1622 (69.9%) scored from 0 to 2.5; 682 (29.5%) scored from 3 to 6; and 15 (0.6%) scored from 6.5 to 8.5 marks. Figure 5 summarizes the performance of the candidates on this question.

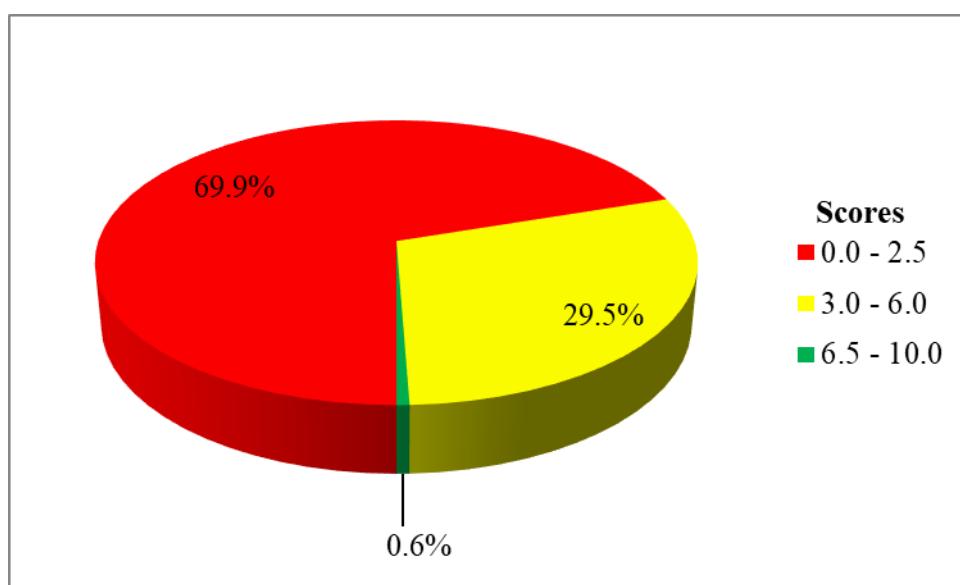


Figure 5: *Candidates' Performance on Question 5*

The candidates' general performance on this question was average because 30.1 per cent scored 3 marks or above.

Those with good performance had adequate knowledge about milk and milk products. A few candidates managed to provide reasons for milk scorching at the bottom of the pan when boiling in part (a) (i) and how to overcome the problem in part (a) (ii). The candidates with good performance understood that, when milk is subjected to heat, it tends to precipitate/coagulate and then settle at the bottom of the pan. As boiling continues, the coagulates/precipitates scorch with the heat produced. For example, one candidate correctly wrote *Because when milk is subjected to*

heat it coagulate and cause the milk at the bottom of the pan to scorch and to overcome this problem stirring occasionally when the milk is boiled. Another one wrote, milk scorch at the bottom of the pan because when heat is applied it cause milk content to coagulate and settled at the bottom of the pan. In order to overcome the problem is to boil milk at very low temperature.

In part (b), the majority of the candidates were not aware that the addition of acidic food to the milk rather than adding milk to the acidic food prevents milk from curdling. They were not aware that thickening may be added to either acidic food or milk before they are mixed together to prevent milk from curdling when mixed with acidic ingredients. They were also not aware that, when acidic food is mixed with milk, it prevents the milk from curdling. Beside, both the milk and acidic food should be hot when mixed together so that curdling can be prevented. Some candidates mixed correct and incorrect responses, whereas others skipped this part of the question. Hence, they scored less marks in this question.

In part (c), the candidates managed to provide the correct responses. This was attributed to their adequate knowledge and practice of storing milk in the absence of refrigerators. For example, one candidate wrote *fill a big bowl with cold water; fill the milk in a bottle and cover it; put the bottle in the water and cover it with a moist cloth; leave it in a cool place.* Another one wrote *Prepare bucket; put water; put the bottles of milk in a bucket of cold water; cover them with a wet cotton and put the bucket on the floor* as Extract 5.1. illustrates.

5.	(a) (i) Milk scorch at the bottom of the pan when boiled due to presence of protein which coagulates thus the protein in milk coagulate to the bottom of the pan when the heat is applied to the milk.	
	(ii) → The problem can be overcome by boiling the milk at very low temperature. This will help to avoid coagulation of milk protein.	
	(b) (i) Boiling the milk before mixing with a particular acid ingredient. This will help to mix the milk well with that material.	
	(ii) Stirring the milk when adding the acidic ingredient. This also will help to tackle this as the milk will be uniformly mixed.	
	(c) (i) Put the milk into a clean bottle and cover the bottle with its lid.	
	(ii) Prepare the basin and put cold water in it and ensure the water is free from contamination.	
	(iii) Put the bottle with milk into the basin of water and make sure that the water reaches a half the bottle.	
	(iv) Cover the bottle with milk with the muslin cloth and make sure the muslin cloth touches the surface of water in the basin.	
	(v) Put the basin on a cool and fresh air to ensure maintenance of coldness of the water in it.	

Extract 5.2: A Sample of the Correct Responses to Question 5

In Extract 5.2, the candidate provided the correct responses to parts (a) and (c). However, this candidate gave incorrect answers to part (b) and thus failed to score all the 10 allotted marks.

Further analysis shows that 69.9 per cent of the candidates attained weak performance; among them, 27.3 per cent scored zero. In parts (a) (i) and (ii), some of those who scored zero misinterpreted the demand of the

question. They gave the intensity of heat instead of the reason why milk scorches at the bottom of the pan when boiling. For example, one candidate wrote *Because of a high amount of heat used to boil milk, to overcome this problem milk should be boiled in low heat*. Another one wrote, *because temperature increased over boiling point, to overcome this problem boil milk in a large pan*. Others wrote irrelevant responses, such as *because milk contains gum-like material which stick to the bottom of the pan when heating or boiling, to overcome this reduce the heat*. Another one wrote *due to motion of bubbles from milk, to overcome boil milk in a large utensil and without cover it*. However, these responses were incorrect and indicate that the candidates had insufficient knowledge about milk heat treatment.

In part (b), they failed to provide the correct responses as they lacked knowledge of addressing the milk curdling problem when milk is mixed with acidic ingredients. The candidates seemed to have insufficient skills in milk handling. For instance, one candidate wrote *proper method of preserving milk for instance by dehydration, pasteurization and other method, Acidic ingredient should not be added to the milk example lemon and acidic salt*. Another candidate wrote, *for example in food preparation eggs should not be mixed with vinegar, ingredients should be kept far from acid like lemon, to store the milk in a proper method*. However, all these responses were incorrect.

In part (c), the candidates misinterpreted the requirement of the question. They provided the methods of food preservation instead of guidelines for storing milk in the absence of a refrigerator. For example, one of the candidates incorrectly wrote *boiling, refrigeration, dehydration and drying*. Another candidate incorrectly wrote, *pickling, fermentation, cooking, refrigerating*. Other candidates gave types of equipment used to store milk contrary to the requirements of the question. For instance, one candidate wrote *using cupboard, using thermos, using jug and using bucket*. Another candidate incorrectly wrote, *Milk can be stored in a bottle, pan, big cup, plastic jug and glass jug*. Such responses imply that the candidates were not familiar with the guidelines for strong milk in absence of the refrigerator. Extract 5.2 is illustrative of the incorrect responses.

5.	a)	
	i)	Because of high amount of heat that used, in order for the milk to boiled well, low amount of heat should be used. This will make preservation of nutrients that are found on Milk.
	ii)	In order to overcome this problem, the milk should be boiled in low amount of heat so as to serve nutrients and to be boiled thoroughly.
	b)	For example in cake making
	i)	Eggs should be beaten at warm temperature.
	ii)	Ingredients should be at a given proportion. Example: bicarbonate, sugar and Margarine.
	c)	Guidelines of storing milk in absence of refrigerator
	i)	Canning
	ii)	Bottling
	iii)	Pasteurization
	iv)	Irradiation
	v)	Addition of chemicals/additives

Extract 5.2: A Sample of the Incorrect Responses to Question 5

In Extract 5.2, the candidate provided incorrect responses to all parts of the question and therefore, lost all the marks allotted to the question.

2.6 Question 6: Fish

This question measured candidates' knowledge of fish. It asked as follows:

- (a) Outline four characteristics of fresh fish
- (b) (i) What are the main reasons for cooking fish? Give two points.
(ii) Why marinating is not necessary in cooking fish?
- (c) With two examples for each type, describe two types of shell fish.

The question was attempted by 2319 candidates. Of whom 714 (30.8%) scored from 0 to 2.5; 1386 (59.8%) scored from 3 to 6; and 219 (9.4%)

scored from 6.5 to 10 marks. Figure 6 summarizes their performance on this question.

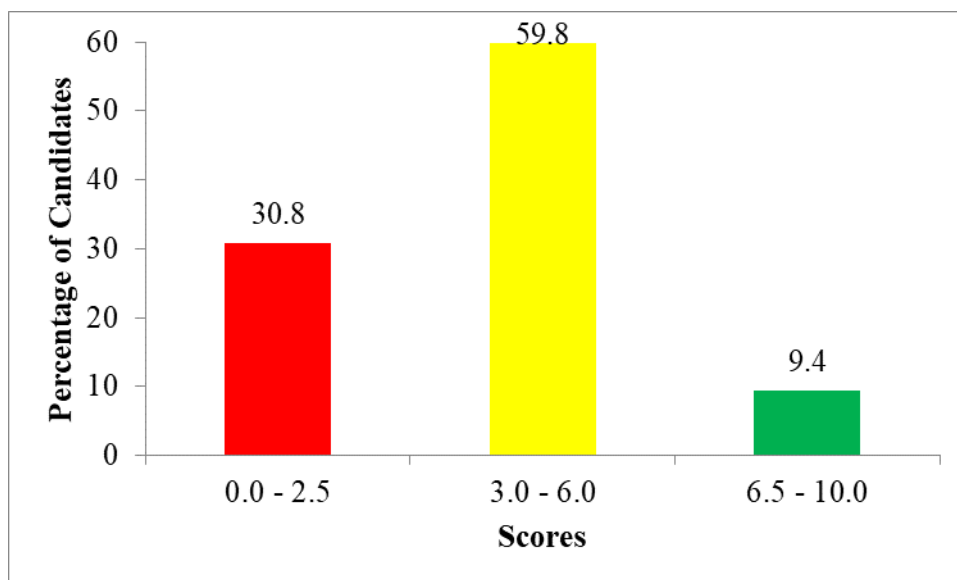


Figure 6: *Candidates' Performance on Question 6*

The candidates' general performance on this question was good because 69.2 per cent scored averagely or above.

The candidates with good performance had adequate knowledge about fish. In part (a), these candidates managed to outline four characteristics of fresh fish. For example, one of the candidates correctly wrote *has bright red gills, has bright eyes, has pleasant smell, has moist skin*. Another candidate correctly wrote *have plenty of scales, have a stiff tail and moist skin*. These responses depicted the candidates' good mastering of the subject matter.

In part (b) (i), the candidates managed to provide two main reasons for cooking fish. These candidates understood that high temperature can destroy microbes and reduce the amount of water in fish. Hence, it increases its shelf life and brings changes of texture. For instance, one of the candidates wrote, *have soft fibres, kill harmful bacteria, to improve flavour*. Another candidate wrote, *to aid digestibility, to improve flavour, to kill bacteria*. These responses were correct as the candidates were aware of the reasons for cooking fish. In part (b) (ii), the candidates understood that it was not necessary to marinate fish as it has few connective tissues, tender and short muscle fibre. For instance, one of the candidates wrote *has less connective tissue*. Another candidate wrote, *has less muscle fibres*. These

responses show that the candidates had sufficient knowledge about the reasons for marinating fish.

In part (c), the candidates with good performance correctly gave the type of fish. Their responses were *fresh shell fish and marine fish*. These responses show that the candidates had enough knowledge of the subject matter. Extract 6.1 is a sample of the correct responses.

6 a.	characteristics of fresh fish. (four)	
i/	fresh fish has bright and unbroken eyes.	
ii/	it has fresh smell i.e. fish smell.	
iii/	it has fresh red gills	
iv/	it has fresh and smooth scales that overlapping around the skin.	
b. i/	Reason for cooking fish.	
-	to kill germs and contaminants contaminants. hence avoid spoilage	
-	to make it attractive and improve flavor and taste	
ii/	Because fish, it has soft and smooth connective tissue compared to the meat and chicken hence marinating is not necessary in fish cooking.	
c.	Two types of shell fish.	
i.	fish that has hard shell such as crab, lobster.	
ii.	fish that lacks hard shell such as star fish, octopus	

Extract 6.1: A Sample of the Correct Responses to Question 6

In Extract 6.1, the candidate managed to give correct responses to all parts of the question and score all the marks allotted to this question.

Conversely, some of the candidates failed to provide correct responses to most parts of the question due to their inadequate knowledge. In part (a), the candidates failed to provide the characteristics of fresh fish. Their responses were *should have good appearance, should have good smell, should come from water, should be well swallowed*. In part (b) (i), they

failed to provide the reasons for cooking fish due to their misinterpretation of the question. Hence, they outlined the functions of the nutrients instead of the reasons for cooking fish. For example, one of the candidates wrote *to get energy to the body and to repair the damaged tissue*. Another candidate wrote *to provide nutrients to the body*. A few of them provided incorrect responses due to their inadequate knowledge of the topic. For instance, one candidate wrote *to give good test and to give good appearance*. Another candidate wrote *easy to swallow, easy to eat, eat when hot and store in a hot pot*.

In part (b) (ii), some of the candidates demonstrated inadequate knowledge about marinating meat. They were not aware that marinating helps to soften meat fibre or tissues and make the meat tender. Their responses were *because fish provide all nutrients found in fish directly, fish itself is well cooked, because it does not involve any thing in the fish and does not add any nutrient in a fish*. Others had inadequate knowledge about fish; accordingly, they failed to respond to this part of the question. For example, one of the candidates wrote *fish itself is attractive*. Yet, another candidate wrote *because fish it taken from the water*. All these responses were incorrect.

In part (c), the candidates provided irrelevant responses due to their insufficient knowledge about fish, especially their types. Their responses were *tilapia fish, cartilage fish, sardine fish, Aquatic shell fish, non-aquatic fish, shell fish, dry fish and moist fish*. Extract 6.2 is a sample response by a candidate who scored weakly in this question.

6	(a) Characteristics of a fresh fish	
	i. The fish should have its original colour	
	ii. Should be uncontaminated with waste	
	iii. A fresh fish should be removed its intestine and gills.	
	iv. Should not be added with chemicals and others.	
	(b) Main reasons for cooking fish	
	i. It have good and better taste	
	ii. Fish have high amount of proteins.	
	(ii) Marinating is not necessary in cooking fish because a fish suspending on the top cause unfishedg cooking and losing nutrients found on fish.	
	(c) Types of shell fish	
	i. Smoked fish for example tilapia fish, fresh fish	
	ii. Roasted fish & Frying eg walrus and whales.	

Extract 6.2: A Sample of the Incorrect Responses to Question 6

In Extract 6.2, the candidates provided irrelevant responses to all parts of the question and lost the marks allotted to this question.

2.7 Question 7: Food and Nutrition

The question measured the candidates' competence in meal planning. It asked as follows:

- With reasons, suggest four important nutrients in a meal that satisfy the need of sports people.
- Recommend a supper for sports people to be taken after exercises.

A total of 2319 candidates attempted the question. Among them, 146 (6.3%) scored from 0 to 2.5; 559 (24.1%) scored from 3 to 6; and 1614

(69.6%) scored from 6.5 to 10 marks. Figure 7 summarizes their performance on this question.

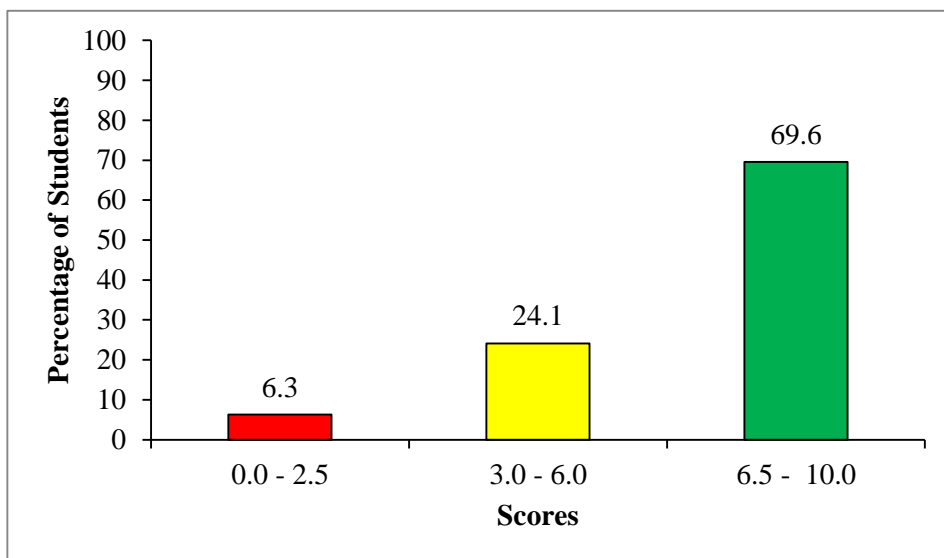


Figure 7: *Candidates' Performance on Question 7*

The candidates' general performance on this question was good since 75.9 per cent of them scored 3 marks or above. This indicates that the candidates had sufficient knowledge about food and nutrition. Analysis indicated that 7.3 per cent of these candidates scored full marks.

In part (a), the candidates understood all the nutrients that were required to satisfy what sports people need. They were aware that carbohydrate was needed for the production of energy as sports people need adequate amounts of energy due to their physical activities. The candidates also understood that fat and oil were required for the production of energy and heat. Moreover, they were aware that protein was required to repair worn out tissues as sports people can get injuries on the ground. The candidates with good performance were also knowledgeable about minerals and vitamins, such as calcium, iron, sodium, vitamin C, D and B that they should be supplied to sports people for proper functioning of their bodies. For example, one of the candidates correctly wrote *carbohydrates for energy giving, fats and oils for energy and protein for repairing and recovering some worn out tissues*. Another candidate correctly wrote *protein for generation and build of dead cells in the body, mineral for formation of strong bones to facilitate good health of the body, vitamins to*

prevent the body against diseases and carbohydrate in order to provide energy to the body.

In part (b), the candidates understood that sports people need a balanced diet. Thus, the candidates correctly recommended a proper balanced diet for supper. For example, one candidate correctly wrote *coconut rice, stewed liver, boiling amaranth and avocado juice*. Another candidate wrote *Potato pilau, beef curry, fried spinach and lemonade*. This implies that the candidate had sufficient knowledge of this matter, as illustrated further in Extract 7.1.

7a)	Carbohydrate - It is an important nutrient as it provide the body of the sports man with enough energy in performing various body activities
ii)	Minerals - A lot of mineral elements such as calcium, phosphorus and sodium helps in formation of strong bones so this nutrients are important to the sports man
7a)	as it will help in formation of strong bones which are very important in sports activities
ii)	Proteins - Protein are also important nutrients as they help in body building and repair of worn out tissue so a meal of sports people need to be rich in protein so as the body can be build up and be strong also the worn out tissue can get repaired
iii)	Vitamins - Vitamins are essential for body's immunity and formation of strong bones. Example Vitamin C is essential for defence against diseases and infections and also Vitamin D is important for absorption of calcium by the body thus formation of strong bones
7b)	Fried spaghetti served with meat stew and saute spinach and mixed fruit juice as a beverage

Extract 7.1: A Sample of the Correct Responses to Question 7

In Extract 7.1, the candidate gave the correct responses to all parts of the question and scored full marks.

In contrast, 6.3 per cent of the candidates scored poorly in this question; among them, 2.8 per cent scored zero. These candidates misinterpreted the requirement of the question in part (a). Some of them provided the functions of food in the body instead of suggesting important nutrients needed by sports people. For example, one candidate wrote *It help to give energy to the body; It help to warm the body; It protects the body against the diseases*. Another one wrote *It help us to build our body; It help to making the body to be strong and power, It help the body to fight against the disease*. Others provided the importance of nutrients in the body instead of important nutrients needed by sports person. For example, one of the candidates wrote *helps to protect our body, helps to give energy in the body, it helps to build our body. Have good hygiene*. This shows that the candidates did not understand the requirement of the question.

In part (b), the candidates also misunderstood the question requirement. Some of them provided the basic requirement for child health instead of recommending supper for sports people after doing exercise. For example, one candidate wrote *to adequate nutrition, love and recreations, shelter, hygiene and sanitation*. Another candidate wrote *to have food, to have rest, to have birth and sleep*. Others provided irrelevant responses due to their inadequate knowledge about food and nutrition. For example, one of the candidates wrote *glucose*. Another candidate wrote *rest after sport*. Apparently, these candidates lack sufficient knowledge of the subject matter. Extract 7.2 illustrates a sample of such responses.

7	a) It helps to given energy in the body	
	It helps to given good health	
	It helps to growth and development	
	It helps to reduce disease	
	b) For sports people to be taken after exercises due to the base body vibrate and	
	Sp recommend a supper for sport	

Extract 7.2: A Sample of the Incorrect Responses to Question 7

In Extract 7.2, the candidate provided incorrect responses to all parts of the question; Thus, he/she lost the marks allotted to this question. In part (a), she/he provided the importance of nutrients in the body.

2.8 Question 8: Appetizer

The question measured the candidates' knowledge of stock and bouquet garni. The question asked as follows:

- (a) (i) *What is meant by the term stock in meal preparation?*
- (ii) *How does stock prevented from turning sour? Give three ways.*
- (b) (i) *Outline the procedure of making a bouquet garni*
- (ii) *Give four types of herbs used in making bouquet garni.*
- (iii) *How would you use bouquet garni.*

The question was attempted by 2319 candidates. Of whom, 2158 (93.1%) scored from 0 to 2.5; 158 (6.8%) scored from 3 to 6; and 3 (0.1%) scored 6.5 marks. Table 1 summarizes their performance on this question.

Table 1: Candidates' Performance on Question 8

Scores	No. of Candidates	Percentage
0.0-2.5	2158	93.1
3.0-6.0	158	6.8
6.5-10	3	0.1

Their general performance on this question was weak since 93.1 per cent of them scored below 3 marks. This performance indicates that they had inadequate knowledge about the subject matter.

Analysis shows that 1012 (43.6%) of the candidates scored zero. The candidates who failed to address this question provided incorrect responses due to their insufficient knowledge about appetizer. They failed to provide the correct meaning of stock in part (a) (i). For example, one candidate wrote *are products obtained or harvested from animal keeping*. Another one wrote *food which is prepared and are good to be used by nursing*

mother. In part (a) (ii), the candidates provided irrelevant responses due to their inadequate knowledge about stock. For example, one candidate incorrectly wrote *make sure that stock is not higher proportion and let put in a cool place before eating again*. Another one incorrectly wrote *stock should have kept separately from another food*.

In part (b) (i), the candidates misunderstood the demand of the question; hence, they provided irrelevant responses. For example, one of the candidates incorrectly wrote: *Clean water should be used in washing utensils used in making bouquet garni should be kept clean*. Another candidate incorrectly wrote: *the price of available dishes, the cost fullness of the dishes, budgeting so as to get a clear picture on dishes*.

In part (b) (ii), the candidates did not know that herbs are the leaf part of a plant that are used in cooking. Hence, some of them wrote spices instead of herbs. For instance, one candidate wrote *garlic, ginger, cinnamon and cardamom*. Another one wrote *onion, pepper, tomato and ginger*. Others wrote irrelevant responses like *chemical herbs, natural herbs, physical herbs, vegetable herbs, fruits herbs, medical herbs, solution herbs, deep frying, smoking, and roasting*.

In part b (iii), the candidates misunderstood the question. Consequently, they failed to provide the correct responses. Their responses were *it uses in cleaning house, to kill harmful bacteria or germs, make floor to look attractive, prevent germ, bring ice, available on the season, make profit and improve market, used as appetizer as it used as main meal, used in cooking, used in garnishing, used in decorating, ingredients and equipment should be available in working place, a bouquet should be made through much care, after made pack at a good packed container and store in a safe place, used in different foods*. Extract 8.1 illustrate such responses further.

8.	a) stock - is the substance that are used in making the soup.	
	ii) - By adding flavour.	
	- By adding spices.	
	- By adding water.	
	b) i) -- Creaming.	
	-- Mixing.	
	-- kneading.	
	-- Sponging.	
	-- Baking.	
	ii) - soft herbs	
	- Hard herbs	
	- solid herbs	
	- Liquid herbs.	
	iii) - They have be used as apatize food	
	and also they have be used as main meal.	

Extract 8.1: A Sample of the Incorrect Responses to Question 8

In Extract 8.1, the candidate misunderstood the requirement of the question hence, provide irrelevant responses.

Further analysis shows that 3 candidates (0.1) attained average performance. They provided correct responses to some parts of the question. In part (a) (i), the candidates correctly provided the meaning of stock. For instance, one candidate wrote *stock is a liquid which is obtained after the simmering a food*. Such a response shows that these candidates had sufficient knowledge about stock. In part (a) (ii), a few candidates managed to provide some ways of preventing stock from turning sour. For instance, one candidate wrote *should be reheated*. Another candidate correctly wrote, *remove other ingredients which spoiled easy*. Others skipped this part of the question.

In part (b) (i), some of the candidates correctly outlined the procedure for making a bouquet garni. For example, one candidate wrote, *collect all the herbs, take clean dried piece of cloth, put all herbs in piece of cloth*.

Another one wrote *herbs should be putted in a clean white cloth, the cloth should then be tightening well, put the bouquet garni in the soup so as to extract flavour and drain it after the soup to be ready*. These candidates knew the procedures for making banquet garni.

In part (b) (ii), the candidates who performed average managed to provide less types of herbs. Their responses were *Rosemary, thyme, bay leaf, parsley, coriander leaves and mint*.

In part (b) (iii), the candidates managed to provide the use of a bouquet garni. For example, one of the candidates wrote *by adding in the food while cooking in order to add flavour in the food*. Another candidate wrote *it is used in stewing the soup*. The candidates provided correct responses due to their adequate knowledge of soup and practical skill in making flavoured soup using a bouquet garni.

2.9 Question 9: Reheated Food

The question measured the candidates' knowledge about reheated foods. The candidates were asked as follows:

- (a) (i) *Why is it advisable to reheat left overs food? Give three reasons.*
- (ii) *With two examples of food for each type, name two types of food that can be reheated.*
- (b) *State four rules to be followed when reheating food.*

A total of 2319 candidates attempted the question. Of whom 376 (16.2%) scored from 0 to 2.5; 1290 (55.6%) scored from 3 to 6; and 653 (28.2%) scored from 6.5 to 10 marks. Figure 9 summarizes their performance on this question.

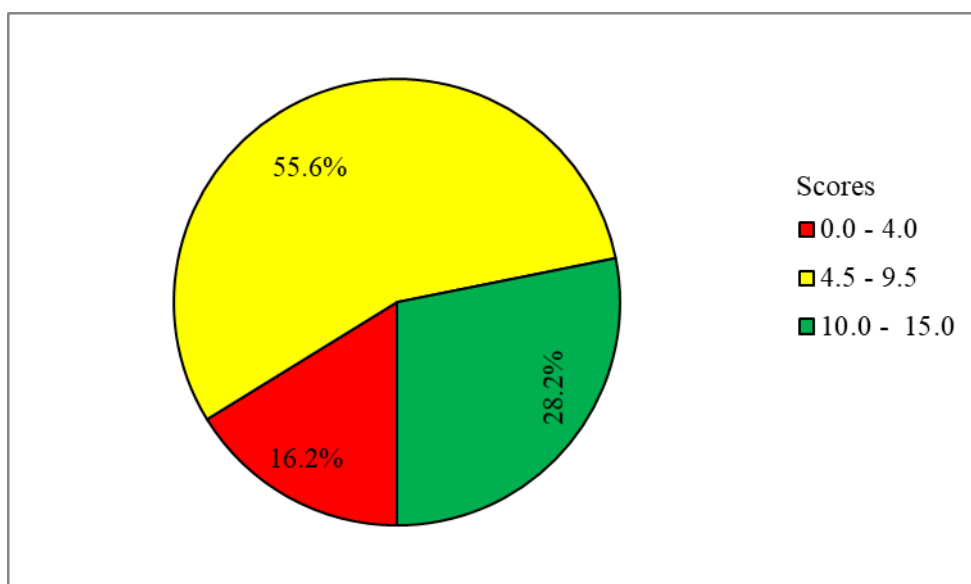


Figure 8: *Candidates' Performance on Question 9*

The candidates' general performance on this question was good since 83.8 per cent scored 3 marks or above. This shows that they had sufficient knowledge about reheated foods.

The candidates with good performance demonstrated a good mastery of the subject matter. The majority provided correct reasons for reheating leftover foods in part (a) (i). They understood that, when food is reheated, it becomes hot; bacteria are killed; reheating preserves the food by extending its shelf life; new dishes can be formed, and some nutrients can be added, increasing its nutritive value. For instance, one of the candidates wrote *to kill the micro-organism that may be found in the food substance, to add flavour to the food and improve the texture by some ingredient, to make it obtain good temperature and digestibility of it in the body*. Another candidate wrote *to avoid wastage of food, to make it attractive, to make it safe and ready to be consumed again*. A few candidates confused correct with incorrect responses. Hence, they scored few marks. For instance, one of the candidates wrote *to make it more nutritive, to make it more digestive and to kill micro-organisms*. Another candidate wrote *to reduce bulkiness, to moisturize the food since it was dry from being left and to make it hot*.

In part (a) (ii), the candidates were knowledgeable about the types of food that could be reheated from different kinds of leftover foods. They understood that new food can be prepared from vegetables like potato

cakes, potato balls, pies, salads. They also knew that bread can be used to make bread crumbs as well as use in coating various foods and meat dishes can be used to make meat curries, rissoles, kababs and croquettes. For example, one of the candidates correctly wrote: *Roasted meat used to make meat stew and Fried Irish potato used to make kachori (potato balls)*. Another candidate correctly responded: *Bread used to make sandwich and cooked meat used to make banana meat stew*.

In part (b), some candidates stated correctly the rules to be followed while reheating foods. This was attributed to their sufficient knowledge of and skills in reheated food. Their responses were: *Reheated food should be eaten soon as possible after being made; added ingredients should be cooked first before mixing with a reheated food, the reheated food should be mixed with other ingredients so as to increase the nutrients content of food and flavours; reheated food should not be recooked because may cause much more loss of nutrients; reheated food should be done in hygienic manner; and reheated food should be of small pieces for heat to penetrate evenly*. A sample of the correct responses to this question is shown in Extract 9.1.

9.	i) To kill harmful bacteria which led to the food contamination.	
	ii) To have hot food again.	
	iii) To make food easily digested and more attractive due to the addition of ingredients.	
	iv) To avoid wastage and spoilage of food.	
	ii) Vegetable (Boiled Potatoes)	
	eg Creamed potatoes and Mashed potatoes	
	Meat	
	eg Meat Samosa, Minced meat Stew...	
	Rice Boiled rice	
	eg Vegetable rice.	
	b) Left When reheated food should avoid overcooking again.	
	i) During reheating of food, should add different ingredients in the food that can make it more attractive like Carrot, pepper and other.	
	ii) Addition of moisture is very important because it add texture and flavour of food example addition of milk in potato.	
	eg creamed.	
	iv) Leftover / reheated food should be kept in area clean and covered container to avoid contamination.	

Extract 9.1: A Sample of the Correct Responses to Question 9

In Extract 9.1, the candidate provided correct responses to all parts of the question and scored full marks.

However, some candidates performed poorly; they scored from 0.0 to 2.5 marks. This was caused by their insufficient knowledge about reheated food. Others did not understand the demands of the question. For example, in part (a) (i), some of them provided the advantages of using leftovers as they responded *because it simplifies work, because it saves time, because it not used a lot of money directly, help to save money like in the gas used many fuels*. Yet, others provided incorrect responses such as; *It help us to get energy; It help us to get good health; It help us to get protein on a body, easy for digestive system, due to its coldness; sometimes, may cause disease or stomach pain, because the nutrients it lost, because the food it become*

too much soft, because the taste of the food it lost, because cold food can disrupt the stomach, help us to do not get heartburn, to retain freshness. However, a few candidates managed to mention partly correct reasons, which prevented them from scoring full marks.

In part (a) (ii), some candidates misinterpreted the demand of the question. Therefore, they provided the types of food with their nutrient contents. The responses were *carbohydrate foods example banana stew, protein foods example meat, fried mchicha/liver stew → vitamins/minerals foods, fried eggs with rice → protein food.* Others provided irrelevant responses such as *the food must be reheated are cereals food example rice and beans, butter food reheated, moist foods and drying food.* This implies that these candidates had insufficient knowledge of reheated foods.

In part (b), they misunderstood the demand of the question; hence, they provided irrelevant responses. Their responses were *you should make a new food; it should not be having bad odour; it should be well and easy to digest; it should be free from microorganism, do not add a lot or any amount of water in the food, must have good quality ingredient; must have a good flour and must have a free yeast.* Other responses were *to put a lot of water; to put cereal food and not ingredient, to open your food and see then, to close the food very well; it should not lose its natural taste; you should not heat it more; you should make sure no nutrients are lost.* These candidates demonstrated poor understanding of reheated foods as illustrated further in Extract 9.2.

9a)	i) To be easy to digested	
	ii) To make the food soft	
	iii) To make it tender	
	ii) d) Make Maccaron eg you can add beans and some meat and then to reheat	
	b) U'gali eg You can add onion, oil, and some meat you can eat.	
	b) i) The food should be contain all types of nutrient that needed in the food.	
	ii) The food should not reheated more	
	iii) The food should be reheated so as to kill some bacteria / to kill harmful bacteria and germs	
	iv) The food should be balanced by all nutrients	

Extract 9.2: A Sample of the Incorrect Responses to Question 9

In Extract 9.2, the candidate provided incorrect responses to all parts of the question because of misunderstanding the demand of the question.

2.10 Question 10: Catering

This essay question intended to measure the candidates' competence in explaining the health hazards that could occur to consumers who are the users of street catering. The question asked as follows:

Street catering may result into health risk to consumers if improperly planned. Support this statement by explaining four possible hazards to consumers who are the users of street catering.

A total of 661 candidates responded to the question. Of whom, 160 (24.2%) scored from 0 to 4; 483 (73.1%) scored from 4.5 to 9.5; and 18 (2.7%)

candidates scored from 10 to 12 marks. The candidates' performance to this question is summarized in Figure 9.

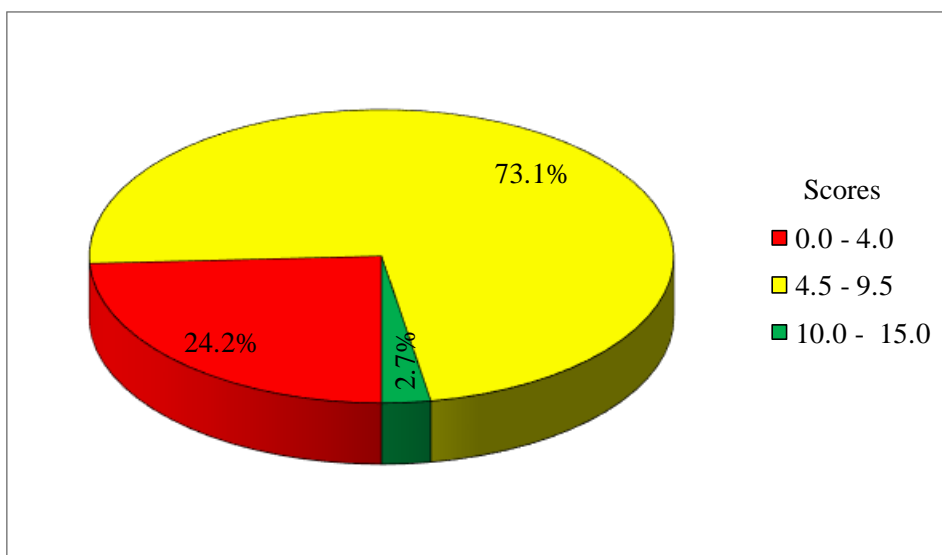


Figure 9: *Candidates' Performance on Question 10*

The candidates' general performance on this question was good since 75.8 per cent of the candidates attained average performance or above. These candidates had adequate knowledge about catering.

Analysis shows that 2.7 per cent of the them attained good performance. Of whom, 5 (0.2%) scored 12 marks as the upper scores. These candidates correctly explained the possible health hazards that could occur to consumers who use street catering. Most of the candidates understood this aspect but provided less correct responses or insufficient explanation. Hence, they did not score full marks. Others mixed correct and incorrect responses. The candidates understood that the outbreak of diseases may occur due to food contamination if caterers fail to observe hygiene. Additionally, they were aware that imbalanced or poorly prepared meals can cause malnutrition. Furthermore, they understood that an accident may occur as the vehicle may lose control and skid into the catering area. For example, one of these candidates wrote *spread of diseases when consume contaminated food from bacteria or Poor waste disposal, occurrence of malnutrition due to poor meal planning*. Another candidate wrote, *it brings eruption of diseases like cholera due to poor hygiene and lead to death due to accident*. These candidates organized their essays logically by providing

clear introductions, well explained points in the main body and good conclusions.

However, 160 (24.2%) of the candidates performed poorly. Of whom, 19 (2.9%) scored zero. Some of those who scored zero misinterpreted the question's requirement. They explained the problems which might occur to street caterers instead of providing health hazards of street catering users. For instance, one candidate wrote *being raped, poverty, lack of security and uses of drug abuse*. Another one wrote *spread of HIV/AIDS because people engage in prostitution and unplanned pregnant*. Others misunderstood the requirement of the question. Hence, they provided irrelevant responses. For example, one of them wrote *death; decrease the manpower in our family; It can cause loss of skilled people in our health services like nurse; doctor and the professional; Pain during pregnancy; and pain during birth delivery*. Yet, another candidate wrote *consumer should ensure cleanness of her hand; consumer should consume food that prepared in clean and conducive environment; and consumer should ensure the provision of a well-balanced diet*. These were incorrect responses. Extract 10.1 is an example of the incorrect responses to this question.

10	<p>Catering is a service that is offered to people all around by an organization or a group of people. Involves provision of foods, decoration, accommodation and drink services. Catering organization are usually well planned and prepared in different occasions such as party, hotels, motels, schools, Lodges etc. Catering service is very important and useful because it aids as a source of employment and income to a particular group of people. The following are the important points to observe for the consumer.</p> <p>First, The consumer should ensure the cleanness of her hands, the utensils and the food she is going to eat. They should be clean for them to ensure good health without food poisoning.</p> <p>Second, The consumer should eat a well full cooked meal. The consumer should avoid uncooked meals because these meals can lead to different problems and stomach pains. Uncooked meals can also lead to diseases.</p> <p>Third, The consumer should consume foods that are prepared in clean and conducive environment. The consumer should first study the environment of that particular place then make up her choice to eat it or not to eat. So the consumer should ensure cleanness of goods.</p> <p>Fourth, consumer should ensure the provision of a well balanced diet to build and strengthen the body. The consumer should plan a menu that is well balanced for-</p>	
	<p>him to get all the required nutrients in the body.</p> <p>conclusively, Apart from that catering is a high source of employment to people. People are employed to many catering service institution as they aid money and obtain currency from it. Also rendering food to people.</p>	

Extract 10.1: A Sample of the Incorrect Responses to Question 10

In Extract 10.1, the candidate failed to explain the possible health hazards to consumer who use street catering.

2.11 Question 11: Food and Nutrition

This question required the candidates to describe four factors that affect the nutritive value of foods. The question asked as follows:

Food stuff needs to be handled carefully in order to prevent their nutrients. Support this statement by describing four factors that affect the nutritive value of foods.

A total of 1658 candidates attempted this question. Data show that 398 (24%) scored from 0 to 4; 839 (50.6%) scored from 4.5 to 9.5; and 421 (25.4%) scored from 10 to 15 marks. This performance is summarized in Figure 10.

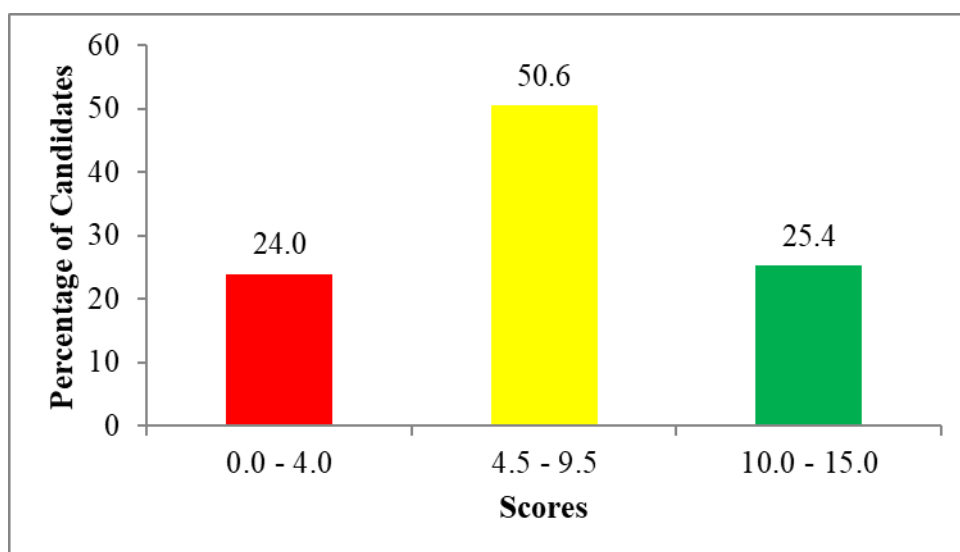


Figure 10: Candidates' Performance on Question 11

Their general performance on this question was good since 76 per cent of the candidates attained an average performance or above. Those with good performance had adequate knowledge about food and nutrition.

The response given by the candidates who performed well on this question indicated that they managed to explain four factors that affect the nutritive value of foods. Some of the correct responses they provided were *over cooking of food destroys nutritive content of the food; too much washing*

removes nutrients from the food; some methods of preserving food may affect nutrient content of the food; some methods of food storage may affect nutrients content of the food, addition of chemicals can add or destroy nutrient content of the food; soaking the food removing nutrients from the food; storage of food for long period of time cause loss of nutrients; and preparation of food; preservation and storage of food; methods of cooking the food may cause loss of some nutrients. These responses show that these candidates understood the factors affecting the nutritive value of food as Extract 11.1 illustrates further.

11.	<p>Food is any liquid or solid substance, which when taken in the body provide it with necessary material which help in growth and maintain body health. All food contains nutritive values, such as carbohydrate, protein, vitamin, fat and mineral salt. These nutrients each have its function in the body and it is important eg. Carbohydrate provide energy to the body. This nutrients it is important to be preserved during preparation of food. There factors which may lead to the loss of the nutrients.</p> <p>The following are the factors that affect the nutritive value of foods.</p> <p>Over cooking; Over cooking may lead to the loss of the nutritive value in the food, most nutrient lost by overcooking is Vitamin C. too much cooking destroy vitamin C, and cause food to become less insufficient to vitamin C which is essential in the body for improving body immunity and prevent it from diseases.</p> <p>Too much washing; Too much washing of food during preparation destroy different nutrients, example of the food affected by the too much washing is rice, rice lose its nutrients when washed too much.</p> <p>Method of preserving; Other methods of preserving foods affect its nutrients, example drying in the sun make more nutrients to be destroyed, by the sun rays example of food affected by drying in the sun are all vegetables, sun rays destroy vitamin C and other minerals also.</p> <p>Refrigerator destroy some nutrients in the food.</p> <p>Method of storage; Other storage method alter the destruction of nutrients in the food, example refrigeration, this method destroy some nutrients in the food, and freezing, this also destroy or reduce some nutrients in the food hence make it insufficient in nutrients.</p>	
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11.	In generally; Each nutritive value in food have its	
	importance in the body, so nutritive value in food sh	
	ould be preserved by any means including avoiding	
	of the factors which contribute its loss of nutrients con	
	sider food and its proper handling and preparation to avo	
	id destroy of nutrients in it.	
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Extract 11.1: A Sample of the Correct Responses to Question 11

In Extract 11.1, the candidate managed to describe four factors that affect the nutritive value of foods and scored all the marks allotted to this question.

conversely, some candidates had weak performance because they misinterpreted the question. Consequently, they gave the wrong factors to consider when planning for a meal. For instance, one of them wrote *number of people, people preference, time, unawareness and money available*. Another candidate wrote *leftover, season of the year and health of the consumer*. Yet, other candidates wrote *in adequate access of food hygiene, lack nutritive value, lack of balanced diet, by reheat the leftover foods*. Another one wrote *micro-organism, bacterium mold, parasites, poor science and technology and incorrect handling*. These wrong responses show that the candidates had insufficient knowledge about factors that affect the nutritive value of foods. Extract 11.1 is illustrative.

11.	<p>Nutritive value; These are the nutrients which found in the food. These nutrient includes carbohydrates, protein, vitamins, fat, mineral elements such as potassium, phosphorus, calcium, and iodine where by mineral elements helps in building strong bones and teeth and carbohydrate helps in giving the body energy.</p> <p>The following are the factors affecting the nutritive value of food:</p> <p>Like and dislike of the people; This is one of the factor that affect the nutritive value of food that dislike of the people may affect their nutritive value since they will not consider the balancing meal that they have to take.</p> <p>Poverty; This is the situation where by a person is unable to obtain his/her basic need of life. This can affect the nutritive value as the family will not get the money to eat well balanced diet that could improve their health.</p> <p>Ignorance; Moreover nutritive value can also be affected by this factor as many people ignore to eat well balanced diet as a result they end up with malnutrition which may final cause even death.</p> <p>Money available; Also this can affect the nutritive value that when the money is available in the family it will become much easy for the family to acquire adequate balanced diet.</p> <p>Generally speaking nutritive value of food can be affected by different factors so education should be given to the people so as to improve their diet and also explaining to them on the effects of not eat balanced foods so as to avoid malnutrition and other nutrition deficiencies.</p>
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Extract 11.2: A Sample of the Incorrect Responses to Question 11

In Extract 11.2, the candidate gave incorrect responses to Question 11. Hence he/she lost all the marks allotted to this question.

3.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE PER TOPIC

The topic-wise analysis of candidates' performance shows that the candidates performed well on the topics of *The Expectant Mother*, *Good Grooming*, *Food Preservation*, *Staple Foods*, *Floors and Floor Coverings*, *Public Health Services*, *Kitchen and Food Hygiene*, *Laundrying in The Home*, *Food and Nutrition* and *Early Marriage* (91.1%), *Reheated Food* (83.8%), *Family Roles and Relationship* (82.8%), *Food and Nutrition* (76.0%), *Catering* (75.8%) and *Fish* (69.2%), which were assessed in

questions 1,9,3 and 4, respectively. The performance on these topics were attributed to candidates' adequate knowledge about the topics and their clear understanding of the requirements of the respective questions. In addition, they had adequate practical skills in responding to the questions.

The candidates attained average performance on the topics of *Pastry* (55.6%), *Children's Ailment* (43%) and *Milk and Milk Products* (30.1%), which were assessed in questions 4, 2 and 5, respectively. These candidates had fairly adequate knowledge about the concepts tested. They provided partial or incomplete responses.

Conversely, the candidates attained weak performance on the topic of *Appetizer* (6.9%), which was assessed in question 8. Analysis indicates that the weak performance on this topic was due to candidates' insufficient knowledge of the tested concept, failure to interpret the demands of the question and lack of clarity in their explanations. Appendix A summarises the candidates' performance on each topic, whereas Appendix B summarizes their general performance in grades for the years 2022 and 2021.

4.0 CONCLUSION AND RECOMMENDATIONS

4.1 Conclusions

Generally, the candidates' performance in the CSEE 2022 Food and Nutrition subject was good since 99.83 per cent of the candidates passed the examination. The analysis showed that the candidates attained good performance on six (6) topics, average performance on three (3) topics and weak performance on one (1) topic. The good performance was attributed to candidates' adequate knowledge about the concepts tested in the respective topics and clear understanding of the requirements of the respective questions as well as adequate practical skills in responding to the questions. The average performance attained stemmed from the candidates' partial knowledge of the concepts covered, failure to interpret the demands of the questions and lack of clarity in explaining the mentioned points. The weak performance was attributed to the candidates' failure to identify the demand of the question, and lack of knowledge about various concepts included in the examination.

4.2 Recommendations

Considering the analysis of the performance in Food and Nutrition subject, the following are recommended in order to improve performance in the coming years:

- (a) Teachers should put more emphasis on students' practice of both theory and practical oriented concepts to meet the objectives.
- (b) Teachers should encourage group discussions among students which help to exchange ideas and improve their understanding of concepts.
- (c) Subject teachers should make sure that all topics are well covered and revised before the candidates start their examinations.
- (d) Teachers and students are advised to read the Candidates' Item Response Analysis report (CIRA). This will enable them to find the factors which affect candidates' performance and take appropriate measures in the classroom teaching and learning process to improve candidates' performance.

Appendix A: Summary of Candidates' Performance per Topic

S/N	Topic/sub topic	Number of questions	The percentage of candidates who scored 30% or above	Remarks
1.	The Expectant Mother, Good Grooming, Food Preservation, Staple Foods, Floors and Floor Coverings, Public Health Services, Kitchen and Food Hygiene, Laundering in The Home, Food and Nutrition and Early Marriage	1	91.1	Good
2.	Reheated Food	1	83.8	Good
3.	Family Roles and Relationship	1	82.8	Good
4.	Food and Nutrition	2	76.0	Good
5.	Catering	1	75.8	Good
6.	Fish	1	69.2	Good
7.	Pastry	1	55.6	Average
8.	Children's Ailment	1	43	Average
9.	Milk and Milk Products	1	30.1	Average
10.	Appetizer	1	6.9	Weak

Appendix B: Comparison of Candidates' Performance in CSEE 2021 & 2022

