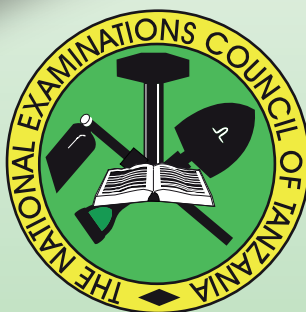**THE NATIONAL EXAMINATIONS COUNCIL OF TANZANIA**

CANDIDATES' ITEM RESPONSE ANALYSIS REPORT FOR THE CERTIFICATE OF SECONDARY EDUCATION EXAMINATION (CSEE) 2018

051 FOOD AND NUTRITION

THE NATIONAL EXAMINATIONS COUNCIL OF TANZANIA

CANDIDATES' ITEM RESPONSE ANALYSIS REPORT FOR THE FORM FOUR NATIONAL EXAMINATION (CSEE) 2018

051 FOOD AND NUTRITION

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FOREWORD

The candidates' Items Response Analysis Report for the Certificate of Secondary Education Examination (CSEE) 2018, in Food and Nutrition theory paper was prepared to provide feedback to education stakeholders about the candidates' performance in this subject. These are candidates, teachers, parents, policy makers and the community as whole. It focuses on identifying and highlighting the strengths and weaknesses of candidates' responses in the assessed topics which were covered in four years of Ordinary Secondary Education. It also identifies areas which need improvements and suggests measures to be taken by education officers, education administrators, school managers, school quality assurers, heads of schools, teachers and students to improve teaching and learning process.

The analysis presented in this report is intended to contribute towards the understanding of some reasons behind the candidates' poor or good performance in Food and Nutrition subject. The report highlights some of the factors that made candidates score high or low marks in the questions. The factors which led candidates score high marks included: ability of the candidates to understand the demands of the questions and sufficient knowledge and skills of the subject matter. However, the factors which contributed to the candidates' poor performance in some of the questions included: failure to identify the demands of the questions, insufficient knowledge of basic concepts of Food and Nutrition and poor proficiency in English Language. The feedback provided in this report will enable the education stakeholders to come up with proper measures in order to improve teaching and learning processes hence, good candidates' performance in future examinations administered by the Council.

Finally, the National Examinations Council of Tanzania would like to thank everyone who participated in the preparation of this report.

Dr. Charles E. Msonde
EXECUTIVE SECRETARY

1.0 INTRODUCTION

This report analyses the candidates' performance in Food and Nutrition theory examination for the candidates who sat for Certificate of Secondary Education Examination (CSEE) in November, 2018. The examination assessed competences according to the 1997 Home Economics Syllabus.

The paper was divided into three sections; A, B and C with a total of eleven (11) questions. Section A consisted of two (2) objective questions each carried 10 marks. Section B consisted of six (6) short answer questions with 10 marks each. Section C had three (3) essay questions each carried 20 marks. Section A and B were compulsory while in section C, the candidates were required to answer only one question.

The analysis of examination results shows that 2,214 candidates sat for this examination of which 2,211 had clean results and the results of 3 candidates were withheld for various reasons. The analysis further indicates that 2,179 (98.55%) candidates passed the examination as follows: 68 (3.07%) obtained grade A, 580 (26.23%) obtained grade B, 1,367 (61.83%) obtained grade C and 164 (7.42%) obtained grade D. However, 32 (1.45%) candidates failed the examination by obtaining grade F. The candidates' performance in 2018 was better compared to that of 2017 with a difference of 0.4 percent.

In this report, the performance of candidates in each question is regarded as good if they scored from 65 to 100 percent. It is considered average if the candidates scored from 30 to 64 percent, and poor (weak) if the score is from 0 to 29 percent. Good, average and poor performances are indicated by using green, yellow and red colours, respectively presented in figures and appendix A. The pass mark for each question was 30 percent of the marks allocated and above.

This report provides the analysis of each question by giving an overview of what the candidates were required to do, the general performance and the reasons behind their performance. The sample extracts of candidates' responses and graphs that indicate distribution of candidates' scores are presented to support the analysis.

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2.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE IN EACH QUESTION

2.1 Section A: Objective Questions

This section consisted of two compulsory questions which are *multiple choice items* and *matching items*. Each question consisted of 10 items carrying 01 mark each, making a total of 20 marks for the whole section.

2.1.1 Question 1: Various Topics

This question consisted of multiple choice items (i) to (x) set from the topics of *Public Health Services, Laundering in the Home, Beverages, Methods of Cooking, Meat, Pastry, Eggs, Packed meals, Cereals* and *Food Preservation*. The question instructed the candidates to choose a correct answer from among the given five alternatives and write its letter beside the item number in the answer booklet provided.

All candidates 2,209 (100%) attempted this question. The general performance for this question was good since 1,806 (82.0%) candidates scored average and above. The analysis of the performance indicates that 290 (13.1%) candidates scored from 7 to 9 marks, 1521 (68.9%) scored from 3 to 6 marks and 397 (18.0%) scored from 0 to 2 marks. No one scored full marks. The performance for this question is illustrated in Figure 1.
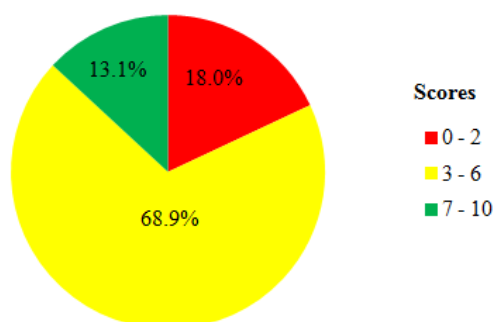

Figure 1: *The percentages of candidates' performance in question 1*

The analysis of the candidates' responses in the items of this question is as follows:

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Item (i) required the candidates to identify the reason of providing curative health services during disease outbreak. The correct response was D, *for treatment*. The candidates who opted for the correct response were aware that curative health services are the services that treat patients with the aim of curing them. However, some candidates opted for A, *for prevention* or C, *for immunization* as they failed to realize that these are the reasons of providing preventative health services before disease outbreak. Those who opted for B, *for diagnosis* or E, *for consultation* failed to understand that these are the reasons of providing diagnostic and consultative health services respectively, and not curative health services.

In item (ii), the candidates were given a laundry code and asked to identify its meaning.
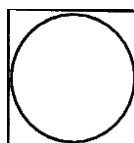
The correct response was B, *dry cleaning*. The candidates who opted for this response had adequate knowledge and practical skills on laundry codes or symbols. They understood that a code of a square with a circle in the middle of it represents dry cleaning. The candidates who opted for A, *drip dry* failed to understand that a basic code for drip drying is a square with three vertical lines inside. Those who opted for C, *bleaching* failed to comprehend that a basic bleach code is a triangle. The candidates who opted for D, *ironing* did not understand that the ironing code is an outline of an iron. Furthermore, those who chose E, *washing* failed to understand that a washing code consists of a bucket with scalloped line across the top, or a stylized washtub, and not a square with a circle in the middle of it.

In item (iii), the candidates were required to identify a compound which produces the stimulating effect in tea. The correct answer was C, *tannins*, which was opted by few candidates who were aware of the types of stimulants found in beverages. The candidates who opted for other distractors had inadequate knowledge on the compounds found in beverages and their functions. Those who opted for A, *phenolic* did not understand that phenolic compounds are responsible for colour, flavour and substrates for enzymatic browning of plant based foods, and not stimulants. The majority of candidates incorrectly chose alternative B, *caffeine*. These

candidates failed to understand that tea contains very small amount of caffeine that cannot cause stimulation. Those who opted for D, *cocaine*, failed to understand that cocaine is not found in tea. The candidates who chose E, *aroma,* did not understand that the aroma in tea is not strong enough to cause stimulation.

Item (iv) required the candidates to identify a kitchen material useful for covering food to prevent it from drying out. The correct response D, *cling film* was selected by the candidates who had adequate knowledge and practical skills on the different kitchen materials used for sealing/covering, cooking, lining, packing, storage and wrapping food. They were aware that cling film is a thin, clear and stretchy plastic that can be used to seal/cover food in order to keep it fresh over a long period. The majority of candidates who opted for incorrect responses selected A, *kitchen foil* or E, *aluminium foil.* These candidates failed to realize that these are suitable materials for cooking, baking, and wrapping food, but not for covering food in order to prevent it from drying out. The candidates who opted for B, *kitchen paper* failed to understand that a kitchen paper is an absorbent paper used for drying and cleaning. Those who opted for C, *roasta bag* failed to understand that this material is used for cooking large portions of meat, poultry, fish and vegetables evenly in order to make them tender, and not for covering food.

In item (v), the candidates were required to identify the name of a slice of meat with no bones. The correct answer B, *fillet* was opted by the candidates with adequate knowledge on the cuts of meat. The candidates who opted for A, *beef*, D, *mutton* and E, *veal* were not aware that these are meat from cattle/adult cows, adult sheep and calves/young cows respectively. Few candidates opted for C, *offal* as it has no bones but failed to remember that offal is the internal organs/organ meats of an animal, and not a slice of meat.

Item (vi) required the candidates to identify the aim of relaxing the pastry dough. The correct response A, *to soften the gluten* was chosen by the candidates with adequate skills on the steps involved in making a good quality pastry and the aim of each step. The candidates who opted for alternative B, *to prevent skinning* or D, *to allow shaping* failed to differentiate the steps of pastry making with those of bread making. In

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pastry making procedure, skinning does not occur due to the use of large amount of fat, and there is no step of allowing shaping. Those who opted for C, *allow cooling,* failed to understand that cooling is allowed after cooking the pastry by keeping it in a proper drying kitchen equipment. On the other hand, the candidates who opted for E, *to prevent sticking* did not understand that sticking is prevented by adding a little more flour to the dough, and not by relaxing it.

In item (vii), the candidates were required to give a reason for not washing eggs. The correct response was D, *bacteria and odour will easily penetrate the egg shell*. The candidate who opted for the correct response had sufficient knowledge on the structure of an egg. They were aware that during washing, water affect the natural barriers in the egg shell and allow bacteria and odour found on the shell to pass into the egg through the pores in the shell. The candidates who opted for A, *they will easily form air space at one end of the egg* failed to understand that air space is a part of the egg and not formed by washing it. Those who opted for B, *water will pass through and affect the content of the egg* or C, *water separates the two membranes and spoil the egg* failed to understand that during washing of the egg water can pass through the egg shell but cannot affect its content or separate the two membranes. The candidates who chose E, *egg shell become soft and may crack easily when boiled* failed to understand that egg shell is made up of calcium carbonate which cannot be softened by the washing water.

The candidates were required to give a characteristic of containers and wrappers used for packing food in item (viii). The correct response was C, *hygienic to keep the food safe*. The candidates who managed to opt for the correct answer were familiar with the suitable materials used for wrapping and packing food, and the advantages of using suitable materials. The candidates who opted for A, *wet to avoid drying of the food* did not understand that wet containers may contaminate the food. Those who opted for B, *greasy to make the food tender* did not understand that food is made tender during preparation and not by greasing the wrapping and packing containers. The candidates who opted for D, *black to hide the packed food* and E, *transparent to show the food* were not aware that the colour and transparency of food wrappers and packing containers have no effect on the food.

Item (ix) required the candidates to give a reason for soaking dried pulses. The correct response was E, *soften the outer skin*. The candidates who opted for the correct response had adequate knowledge and practical skills on the preparation and cooking of dried pulses. These candidates were aware that soaking dried pulses soften the outer skin and shorten their cooking time. The candidates who opted for A, *make them digestible* or C, *make them delicious* failed to realize that these are the reasons for cooking food. Those who opted for B, *add its nutritive value* or D, *preserve nutrients* failed to understand that soaking dried pulses remove some of their nutrients but not add or preserve them. The nutrients removed by soaking dried pulses include, oligosaccharides, water soluble vitamins such as riboflavin, thiamine and folic acid, and non soluble nutrients such as calcium and magnesium.

In item (x), the candidates were required to give the reason of using sugar, vinegar and salts in the food preservation process. The correct response was B, *are anti-microbial substances*. The candidates who opted for the correct response were knowledgeable on the types of preservatives and their roles in preserving food. The candidates who opted for the incorrect responses A, *increases the taste of food*, C, *makes the food delicious* and D, *adds flavour to the food* failed to realize that these are the roles of sugar, vinegar and salts in food preparation and cooking and not in the food preservation process. Those who opted for E, *aids fermentation of food* failed to understand that fermentation is one of the methods of preserving food by using bacteria or permitted chemicals, and not the reason of using sugar, vinegar and salts in the process of food preservation.

2.1.2 Question 2: Kitchen Planning

This question comprised of ten matching items from the subtopic of *Kitchen Equipment*. The candidates were instructed to match the items in **List A** with responses in **List B** by writing the letter of the correct response beside the item number in the answer booklet provided. This question tested the candidate' understanding on the functions of different kitchen equipment.

The question was attempted by 2,207 (99.9%) candidates, while 2 (0.1%) candidates did not attempt it. Data analysis indicates that 552 (25.0%) candidates scored from 7 to 10 marks, 1,254 (56.8%) scored from 3 to 6

marks and 401 (18.2%) scored from 0 to 2 marks. These data show good performance since 1,806 (81.8%) candidates scored 30 percent and above of the allocated marks, as presented in Figure 2.
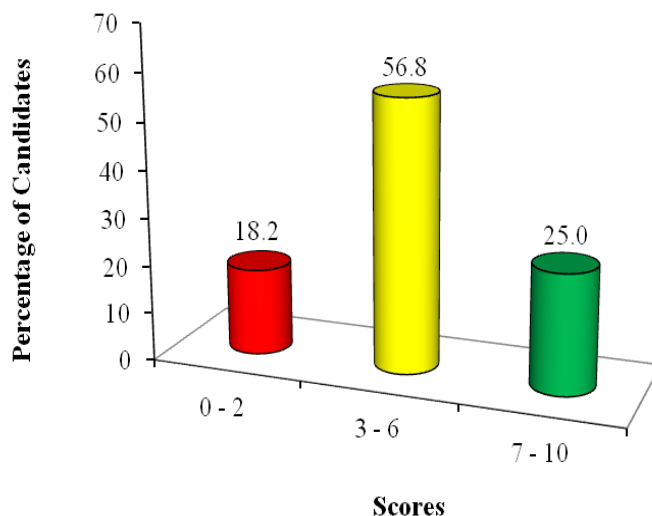

Figure 2: *The percentages of candidates' performance in question 2*

The candidates who performed well in this question had adequate knowledge and practical skills on the types of kitchen equipment and their proper uses. They were able to match all the uses of kitchen equipment with the correct responses. The analysis of the responses in the items of this question is as follows:

In item (i), the candidates were required to identify a kitchen tool used for creaming, mixing and stirring porridge. The correct response was N, *wooden spoon*. The candidates who opted for the correct response understood the uses of wooden spoon in the kitchen. However, some candidates incorrectly opted for J, *whisker* or K, *food mixer* because they failed to read the statement carefully enough to know that whisker and food mixer can be used to cream and mix food, but not to stir porridge.

The candidates were required to identify *an appliance used for creaming cake, chopping meat or vegetables and chopping potatoes* in item (ii). The correct response was K, *food mixer*. Some candidates opted for F, *blender* as they failed to understand that this appliance can be used to cream cake and mash potatoes, but not to chop meat and vegetables. Others opted for

H, *grater* because they lacked the practical skills on the proper use of this appliance.

Item (iii) required the candidates to identify a *cooking equipment that heats food by using high frequency power.* The correct response was *I, microwave.* The candidates who managed to give the correct response had adequate practical skills on how this equipment operates to heat the food. However, majority of the candidates opted for incorrect response *G, pressure cooker* as they failed to understand that a pressure cooker uses steam at high pressure to cook the food, but not high frequency power. Few candidates opted for D, *casserole* and others for I, *iron pot* because they lacked knowledge on the correct use of kitchen tools.

In item (iv), the candidates were required to identify a *cooking equipment that cooks food in a very short time*. The correct response was *G, pressure cooker* which was opted by the candidates with adequate skills on how it works. Some candidates chose option *I, microwave* while others opted for D, *casserole* because they failed to understand that these equipments do not cook food in a very short time.

Item (v) required the candidates to identify a *cooking utensil that can be used for cooking and serving food.* The correct response was *D, casserole.* The candidates who matched this item correctly had adequate knowledge on the proper use of this kitchen equipment. The majority of candidates opted for a variety of irrelevant responses because they lacked knowledge of an equipment with such uses.

The candidates were required in item (vi) to identify *a kitchen tool which is suitable for keeping cakes and biscuits to allow cooling*. The correct response was *B, wire rack*. The item was correctly answered by the majority of candidates who had a clear understanding that cakes and biscuits are cooled on a wire rack which is specially made to allow air to freely circulate around the cake and biscuit and enable the steam to escape. A few candidates who opted for incorrect response D, *casserole* did not understand that casserole is used for cooking and serving food, but not for keeping cooked cakes and biscuits to allow cooling.

In items (vii), the candidates were required to identify the *equipment which is used when preparing egg and egg mixtures*. The correct response was J, *whisker*. The candidates who selected the correct response were aware that a whisker is used to beat or whisk the egg and egg mixtures very fast in order to trap air. Some candidates were attracted by the option K, *food mixer* because they associated the words *egg mixtures* from the stem of the question and *food mixer* in the responses. They failed to realize that other types of food mixers do not have whisking attachment suitable for the preparation of egg and egg mixtures.

The candidates were instructed to identify *a kitchen utensil useful for draining vegetables and pasta into small pieces* in item (viii). The correct response was A, *colander*. The candidates who chose the correct response understood that a colander has holes which drain the food. Of the candidates who opted for incorrect responses, the majority chose E, *sieve*. These candidates failed to understand that a sieve is correctly used for sifting but not for draining.

Item (ix) required the candidates to identify *a tool useful for cutting carrot and other foods like cheese*. The correct response was H, *grater*. The candidates who managed to choose the correct response understood that a grater has a well designed rough surface for cutting foods like carrots and cheese into different small shapes. The candidates who chose alternative O, *large knife* failed to understand that a large knife can be used for cutting carrots and other solid foods, but cheese is cut by using forked/cheese knife or grater. Those who opted for F, *blender* failed to understand that blender is used for mixing liquids and soft foods together, or turning foods into liquid form, but not for cutting solid foods.

In item (x), the candidates were required to identify *a tool useful for sifting solid and liquid foods during food preparation*. The correct response was *E, sieve*. The candidates who selected the correct response realized that a sieve is used to separate and break up clumps in dry ingredients, and separate solids from liquid foods during food preparation. The majority of candidates who chose incorrect responses opted for A, *colander*. These candidates failed to differentiate the use of a sieve from that of a colander in food preparation as both have small holes.

2.2 Section B: Short Answer Questions

This section had six compulsory questions from the topics of *Food and Nutrition, Food Preservation, Packed Meals, Cleaning Agents, Vegetables and Fruits* and *Kitchen and Food Hygiene*. Each question carried 10 marks and consisted of three parts; (a), (b) and (c).

2.2.1 Question 3: Food and Nutrition

The question required the candidates to classify vitamins according to their solubility in part (a), while in part (b) candidates were required to outline four importance of niacin in the body. In addition, the candidates were supposed to briefly explain four functions of minerals in the body which formed part (c) of this question.

The analysis shows that the question was attempted by 2,174 (98.4%) candidates of which 36 (1.7%) scored from 6.5 to 9.5 marks, 818 (37.6%) scored from 3 to 6 marks, and 1,320 (60.7%) scored from 0 to 2.5 marks out of 10. The candidates' performance for this question was average since 854 (39.3%) candidates scored 3 marks and above. Figure 3 gives a summary of this performance.
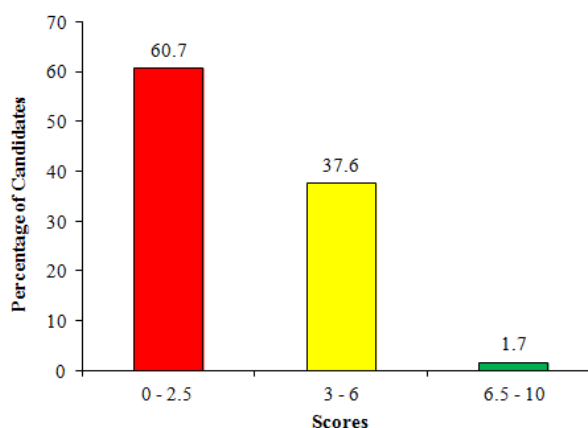
Figure 3: *The percentages of candidates' performance in question 3*

The analysis of candidates' responses reveals that those who scored from 3 to 9.5 marks had sufficient knowledge on the food nutrients required by the human body, and the functions of each nutrient. Most of them were able to classify vitamins according to their solubility as *water soluble* and *fat soluble vitamins* in part (a). A few candidates also managed to outline the

importance of niacin in the body in part (b). However, a good number of candidates responded contrary to the demands of this part of the question, while others provided two to three correct points instead of the required four. For example, one candidate wrote:

(i) *it helps in formation of nerve system,*
(ii) *it prevent some diseases such as pellagra and mental problems,*
(iii) *it enable production energy from food sources and*
(iv) *it ensures the proper occurrence of metabolism.*

The candidate provided two correct and two incorrect points, hence failed to scored all the 4 marks allocated to this part.

Moreover, the candidates were also able to explain the functions of minerals in the body in part (c). The correct functions of minerals provided by these candidates included: *they play a role in the formation and strengthening bones and teeth for example calcium and phosphorus, essential for formation of haemoglobin such as iron mineral, are the components of different cells of the body* and *help in muscle contraction for example potassium and sodium.* Other mentioned functions were: *important for nerve transmission, to maintain acid-base balance, important in blood clotting* and *for proper fluid balance for example sodium, chloride and potassium.*

On the other hand, the majority of candidates who performed poorly in this question had inadequate knowledge on the subject matter. Others failed to understand the demands of all parts of the question. In part (a), most candidates mentioned the types of vitamins instead of classifying them according to their solubility. A few candidates gave the functions of vitamins in the body. They mentioned functions such as, *proper body growth, protect the body from disease, regulation of minerals for body use* and *maintain body good health.*

The majority of candidates did not understand what niacin is, hence provided irrelevant responses in part (b) of the question. They did not understand that niacin is vitamin B_3 which is also known as nicotinic acid. This vitamin is required for release of energy from foods, growth in children, healthy skin, prevention of mental disorders and pellagra, as well as maintenance of the nervous system. Others skipped this part due to lack of knowledge.

Furthermore, in part (c), some candidates failed to differentiate between the functions of minerals in the body with those of foods. As a result, they mentioned the general functions of food in the body such as, *for proper function of the body, for body growth, to repair worn out tissues, to provide heat* and *to provide the body with energy*. The candidates with insufficient knowledge on the functions of minerals in the body provided unrelated responses. Some of the irrelevant functions mentioned were: *to transfer nutrients to all parts of the body, to provide useful nutrients, making the body clean, to balance meals, for body safety* and *to guide for proper growth in the body*. Extract 3 is a sample answer from a script of a candidate with weak performance.

Extract 3

3. a) · Vitamin B		
· Vitamin C		
· Vitamin A		
· Vitamin D		
· Vitamin K		
b) Importances of niacin are		
· It protect the body from diseases		
· It gives body energy.		
· It strengthen body immunity		
· It used to prevent rickets.		
c) Function of minerals are		
· To strengthern the body		
· To gives body energy		
· To provide nutrients that useful to prevent disorders		
· To clean the blood which dirted.		

In Extract 3, the candidate mentioned types of vitamins instead of classes of vitamins according to their solubility in part (a). The candidate provided irrelevant responses in parts (b) and (c) because he/she had insufficient knowledge on the functions of nutrients in the body.

2.2.2 Question 4: Food Preservation

The candidates were required to outline three aims of preserving food in part (a). In part (b), the candidates were required to state four principles of preserving food, while in part (c), they were required to describe three methods that can be used to preserve vegetables.

This question was attempted by 2,189 (99.1%) candidates of which 91 (4.2%) scored from 6 to 10 marks, 1,351 (61.7%) scored from 3 to 6 marks and 747 (34.1%) scored from 0 to 2 marks out of 10. The general performance for this question was good because 1,442 (95.8%) candidates who attempted this question scored average and above, as illustrated in Figure 4.
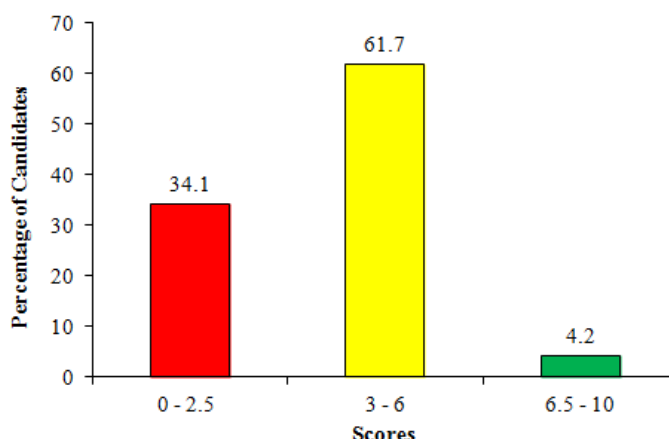

Figure 4: *The percentages of candidates' performance in question 4*

The analysis shows that the candidates with good performance had adequate knowledge on food preservation, particularly on the reasons for preserving foods and various methods used in food preservation. In part (a), the candidates understood that foods are preserved *to prevent food contamination, spoilage and decay,* and *retain qualities of fresh food*. The candidates managed to state the principles which are applied in food preservation in part (b). In addition, most candidates managed to describe the methods that can be used to preserve vegetables in part (c). This shows that these candidates had sufficient practical skills on the preservation of vegetables. They explained methods used to preserve vegetables such as, *reduction of temperature, sterilization of vegetables, reducing temperature, use allowed chemicals, dehydration* and *exclusion of air by bottling and*

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canning. Extract 4.1 is a response from a script of one of the candidates who performed well in this question.

Extract 4.1

4 a) Aims of preserving food		
i) To prevent them from getting bad or decaying		
ii) To prevent wastage of food which was excess.		
iii) To get food in seasons or during the end of the food season.		
b) Principles for preserving food:		
i) Exclusion of air		
In this principles food is preserved by removing all air and closing it in a tight container to avoid decaying because of the survival of micro-organism.		
ii) Dehydration. (Moisture is removed) that is removal of moisture. In this process moisture is removed to prevent good or favourable condition for the growth of micro organism.		
iii) Food is frozen (refrigeration) or change in temperature It's a principle of which food is kept under low temperature to make micro bacteria dormant.		
iv) Addition of chemical substances: This is one among the principles in which substances like sugar and salt are added in the food to prevent decaying or spoilage.		
c) Methods:		
i) Drying (either by sun or other sources). This is a method in which food is dried to remove all moisture Vegetables can be dried to preserve them. example potatoes dry under		

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i) Canning.		
Is the method of preserving food by heating it and enclosing it in a can or bottle. Vegetables like beans can be preserved by this method.		
ii) Addition of sugar, salt or vinegar. Vegetables can be sprinkled sugar or salt which kills the bacteria a therefore becomes preserved.		

In Extract 4.1, the candidate managed to give correct responses in all parts of the question, hence scored good marks.

On the other hand, some candidates who performed poorly in this question had inadequate knowledge on food preservation. Others either failed to understand the demands of some parts of the question or misinterpreted them. In part (a), for example, some candidates mentioned the methods of cooking foods instead of aims of preserving foods. For instance, one candidate wrote, *frying, grilling* and *baking*. Others mentioned the methods of preserving foods. Those who lacked knowledge on the reasons for preserving foods provided irrelevant responses. For example, one candidate wrote, *recycling of foods, reducing the volume* and *reusing foods.* Another candidate wrote, *for preparation of food properly, use machine for food processing, follow personal hygiene in preserving foods* and *food should be put in dry places for preserving*.

Most candidates misunderstood the demand of part (b) of the question, hence provided irrelevant responses. Some mentioned the methods of preserving foods; others listed the chemical additives which are used in food processing which include *sugar, cooking salt, vinegar, smoke* and *spices*, instead of the principles of preserving foods. Furthermore, of the candidates who misunderstood the demand of part (c) of the question, some outlined methods which are used to cook vegetables instead of methods of preserving vegetables. For example, one candidate mentioned *steaming, boiling* and *frying* methods which are used to cook green vegetables. These responses indicate inadequate knowledge the candidates had on food preservation. Other candidates demonstrated poor command of English Language as they failed to express their ideas clearly. Extract 4.2 is a

sample of a response from a script of one of the candidates with poor performance.

Extract 4.2

4 i	vegetable driying	
ii	vegetable Salad packed food	
iii	vegetable cabern packed	
B i	It to packed food	
ii	It to show the food	
iii	It to be driying of the food	
iv	It couking and packed food	
c i	boiling	
ii	sewing	
iii	couking	

In Extract 4.2, the candidate failed to respond correctly to any of the parts. The candidate also showed a poor command of English Language as he/she failed to state correctly the responses in parts (a) and (b).

2.2.3 Question 5: Packed Meals

Part (a) of the question required the candidates to give the meaning of packed meals. Part (b) (i) needed them to identify four types of equipment used for packing meals, and in part (b) (ii), to name suitable food to be packed using equipment identified in (b) (i). In part (c), they were needed to briefly explain four points to consider when planning and packing meals.

This question was attempted by 2.206 (99.9%) candidates. This means, 3 (0.1%) candidates did not attempt this question. The question had good performance since the majority of candidates 2,109 (95.6%) scored 3 marks and above. The candidates who scored from 6.5 to 10 marks were 1,558 (70.6). According to the analysis, 117 (5.3%) candidates scored full (10) marks. In addition, 551 (25.0%) candidates scored from 3 to 6 marks, while only 97 (4.4%) candidates scored from 0 to 2.5 marks. Figure 5 illustrates this performance.
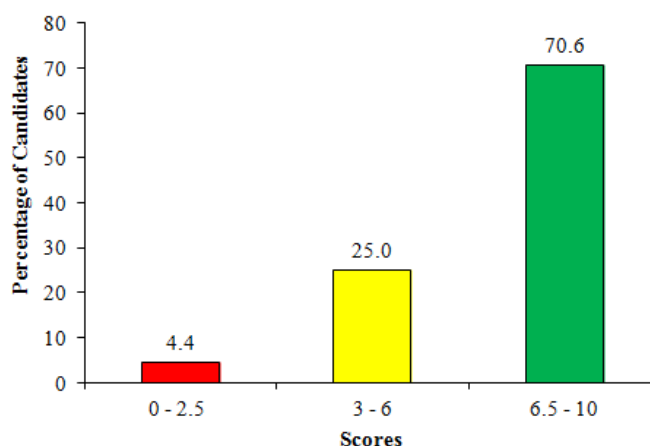
Figure 5: *The percentages of candidates' performance in question 5*

The analysis of the responses shows that the majority of candidates with good performance in this question were able to give the correct meaning of packed meals in part (a). They managed to define packed meals as the meals *prepared and taken to be eaten at work, school, hospital* or *a trip*.

In part (b), most candidates correctly identified the types of the equipment used for packing the meals in (b) (i). They also correctly named the suitable foods to be packed by using the packing equipment they identified in (b) (ii). The identified equipment included: *thermos/flasks, plastic containers, polythene bags, plastic bottles, hot pots, tiffin carriers, aluminium foil* and *grease proof papers.*

In part (c), the candidates managed to explain the points to consider when planning and packing the meals. However, some candidates failed to score full marks in this part because they provided less than the four correct points required. A sample of correct response in this question is presented in Extract 5.1.

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Extract 5.1

5) Packed meals – These are meals which are prepared at home but are eaten far away from home.

b) i) Types of equipments used for parking.
1) Tiffin carrier
2) Foil papers
3) Containers
4) Thermos

ii) Name the food to be packed in:-
1) Tiffin Carrier example meat balls, egg omlet
2) Foil paper example cakes, Chicken
3) Containers example Pilau, rice
4) Thermos example Tea with milk, Soups.

c) Points to consider when planing and packing meals.
1) Consider the age of the person one is planning for. When one is one years old you should not cook solid foods which he or she won't be able to eat or very spicy foods.

2) Consider type of occasion, when one is preparing for a birthday party of a baby consider types of drinks to be kept example fruit juice, sodas but do not put alcohol.

3) Consider type of meal to be packed do not pack meals which decays or discolourate very fast. Example when packing fruit salad do not add bananas and apples since they discolourate fast.

| 5) | 4) Make sure the food which is packed is well balanced. Do not cook only one type of food nutrient and one lives one or more types of food nutrients. Example one should cook x or pack fried potatoes, chicken, fruit juice, water. | |

The analysis of the responses shows that, only 97 (4.4%) candidates scored below average. The responses provided show that these candidates did not understand the demands of some parts of the question. As a result, a number of candidates failed to provide the correct responses. In part (a), for example, some candidates failed to define packed meals. They thought that packed meals are foods prepared for specific groups of people such as surveyors, tourists, and children. For example, one candidate wrote, *packed meals are the meals which contain snack, fruit and so on which are to be used by tourists*. Another one wrote, *packed meals are the foods which are prepared in the family for patients and young children, example soft foods and others*.

In part (b) (i), some candidates failed to identify the equipment used for packing meals. Some of them mentioned the characteristics of packing materials/equipment; others provided the examples of packed foods which include, *cakes, pastry, fruit juices, buns, salads, fried meat, chips* and *fruits*. However, some candidates failed to score any marks in part (b) (ii) as they provided incorrect in part (b) (i). Other candidates mentioned incorrect examples of packed foods to the correct equipment provided in part (b) (i). For example, one candidate wrote, *chips in hot pots* and *juice in metal containers*. This candidate failed to understand that when chips are packed in hot pots they become soggy, while fresh juice packed in metal containers may lose some of its vitamin C.

In part (c), some candidates provided the kitchen hygienic rules to be followed when preparing and cooking foods in order to prevent contamination, instead of providing points to consider when planning and packing the meals. The incorrect rules mentioned by these candidates

included: *consider to prepare food in a clean kitchen, prepare and serve food in clean utensils, washing the fruit and vegetables by using clean water before preparation* and *consider the personal hygiene when cooking*. Others mentioned the points to consider when planning for family meals instead of the points to consider when planning and packing the meals. For example, one candidate wrote, *consider the season of the year for availability of many foods, consider what individual like, time available for preparing the meal* and *money you have to buy food*. A response from a script of a candidate with poor performance is provided in Extract 5.2.

Extract 5.2

In Extract 5.2, the candidate failed to give a correct definition of packed meals. He/she also failed to understand the demands of parts (b) and (c) of the question, hence provided irrelevant responses.

2.2.4   Question 6: Cleaning Agents

This question required the candidates to differentiate cleaning agents from detergents in part (a), while in part (b), the candidates were required to describe four types of soaps. Part (c) required the candidates to list five characteristics of a good laundry soap.

The question was attempted by 2,182 (98.8%) candidates, while 27 (1.2%) candidates did not attempt it. The analysis indicates that 170 (7.8%) candidates scored from 6.5 to 10 marks, 1,073 (49.2%) scored from 3 to 6 marks and 939 (43.0%) candidates scored from 0 to 2.5 marks. The general

performance for this question was average because 1,243 (57.0%) candidates scored 3 marks and above. Figure 6 summarizes this performance.
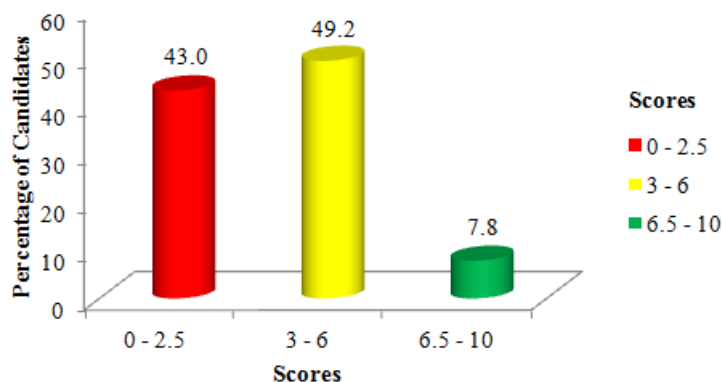

Figure 6: *The percentages of candidates' performance in question 6*

The candidates' response analysis indicates that most candidates who scored average and above had adequate knowledge on cleaning agents, particularly detergents and soaps. The candidates managed to differentiate cleaning agents from detergents in part (a). For example, one candidate wrote, *cleaning agents are substances used for cleaning purpose in various surfaces such as disinfectants like vim for toilet and ashes, while detergents are examples of cleaning agents which are chemical substances such as powdered soap used in cleaning process for the purpose of making dirty and stain loose for easy cleaning.*

In part (b), a good number of candidates managed to provide the correct types of soaps. Some of these candidates mentioned the types of soaps without any descriptions. Others provided unclear descriptions to some of the mentioned soaps. A few candidates treated hard soaps and neutral soaps as two different soaps, while in actual sense they fall under one type.

In part (c), the candidates were able to provide correct characteristics of good laundry soap. Others included one or two incorrect characteristics, hence failed to score all the 5 marks allocated for this part. The incorrect characteristics mentioned by these candidates included: *is soluble in water, it should not cause irritation, it should not bleach the clothes, it should be hard and durable* and *should provide good smell which make the cloth*

smell well. Extract 6.1 is a sample response from a script of one of the candidates who performed well in this question.

Extract 6.1

06 a	cleaning agents	Detergents	
	Are those substance which act act as a source of cle-anless.	Are those materials which are used to remove dirty.	
	Examples of cleaning agents are Abrasive, bleaches	example of detergents are soaps.	
6b.	• Powdered soap - This is the type of soap which present in a powder form. This when is presented in water dissolve quickly and form leather which used as a detergents.		
	• Liquid soap - Is the type of soap which is found in liquid form mainly used in cleaning of toilets.		
	• Bar soap - Is the type of soap which is in solid form this soap can be used in cleaning utensils or in bathing.		
	• Laundry soap. This are soap which used in washing and cleaning of clothes.		
6c.			
	• It must produce leather when present in a water.		
	• It must be the one which does not causes the bleaching of the skin.		
	• Is the one which does not cause diseases like alegy.		
	• Is the one which when kept in dirty places remove dirty easily without even using bleaching agent such as Jik.		

Extract 6.1 shows the answers from the candidate who was able to provide correct responses in parts (a) and (b). In part (c) of the question, the candidate provided one incorrect characteristic of good laundry soap, hence failed to score full marks.

The analysis further indicates that some candidates who performed poorly in this question had inadequate knowledge on cleaning agents. In part (a), the majority of candidates failed to give the difference between cleaning agents and detergents. For example, one candidate wrote, *cleaning agents are chemicals used to clean a place from dirty while detergents are harmful chemicals which used to kill bacteria and germ from the clothing*. Another candidate wrote, *cleaning agents are agents that used in cleaning clothes while detergents are types of cleaning agents that used for washing*. These candidates failed to understand that cleaning agents are substances which are used to remove dirtiness on various surfaces, while detergents are one of the cleaning agents which are used with water to loosen dirtiness and make the cleaning easy.

The majority of candidates failed to understand the demands of part (b) of this question. Some of them mentioned the common soaps used in our society. The mentioned soaps include, *omo, kiboko, mbuni, rungu, family, jamaa* and *foma*. Other candidates failed to correctly read the given term so they responded on 'soups' instead of 'soaps'. For example, one candidate wrote, *potato soup, mixed vegetables soup, stalk soup* and *chicken soups*. A few candidates managed to list few correct types of soaps but did not provide any description, hence scored low marks in this parts.

However, in part (c) some candidates provided a variety of irrelevant responses due to lack of knowledge on soaps. They mentioned irrelevant characteristics of good laundry soap such as: *they must have pleasant smell, must kill bacteria and germs, must be available all over the time, must have good attractive colours, should be able to remove stains, must be durable, must be cheap and easily used,* and *must have label which shows the expiring date and date of manufacture.* Other candidates provided the characteristics of good soup instead of those of good soap due to misconceptions of the demands of parts (b) and (c) of the question.

Extract 6.2

Extract 6.2 shows incorrect responses provided by one of the candidates who had inadequate knowledge on cleaning agents.

2.2.5 Question 7: Vegetables and Fruits

In this question, the candidates were required to outline four uses of vegetable salads in a meal in part (a), and to write three nutritive values of vegetable salads in part (b). The candidates were required to briefly explain how to prepare raw tomatoes for salads in part (c) (i) and raw lettuce for salads in part (c) (ii).

The question was attempted by 2,195 (99.4%) candidates. Data analysis shows that the candidates' performance in this question was good since 2019 (92.0%) candidates scored 3 marks and above. It was observed that 727 (33.1%) candidates scored 6.5 to 9.5 marks, 1,292 (58.9%) scored from 3 to 6 marks and 176 (8.0%) scored from 0 to 2.5 marks, as illustrated in Figure 7.
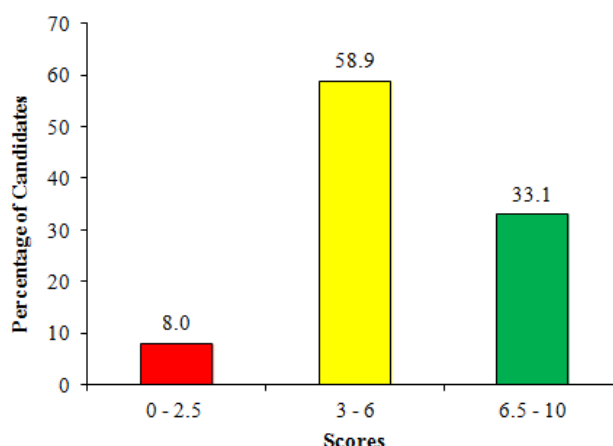
Figure 7: *The percentages of candidates' performance in question 7*

The analysis of responses indicates that the candidates who performed well had adequate knowledge and practical skills on vegetables, particularly on vegetable salads. In part (a), the candidates were aware that in a meal vegetable salad *is used to add flavour and texture, to be taken as snacks, to garnish dishes and make them more attractive, used as fillings in some foods, to add nutrients in the meal like minerals and vitamins, to accompany the main dish* and *to be taken as starter to the main dish*. In part (b), the candidates were able to give the nutrients which are found in vegetable salads which include *water, protein, fats, and some minerals* and *vitamins*. The candidates also managed to correctly explain the procedures of preparing raw tomatoes and raw lettuce for making vegetable salads. Extract 7.1 is a sample responses from a script of a candidate who scored high marks.

Extract 7.1

25

7	c) iv Tomatoes
	- Wash them thoroughly with running water (cold)
	- Remove any foreign visible spot on the surface by a knife
	- Remove the top scar which it was attached to the plant by a knife
	- Chop as required and mix with other vegetables.
	iv Lettuce
	- Clean thoroughly through running water which is cold.
	- Cut out the top most part which is not needed
	- Chop as required, add vinegar and mix with other vegetable
	OR - Arrange them wholes on a plate, add vinegar and put other mixed vegetables on top

In Extract 7.1, the candidate managed to answer correctly part (a), (b) and (c) showing that he/she had sufficient knowledge on vegetable salads.

On the other hand, the candidates who scored below average revealed to have not understood the demands of some parts of this question. Low proficiency in English Language might have also contributed to poor performance because some candidates provided meaningless responses. In part (a), some of these candidates provided functions of foods in the body. Others mentioned types of foods which are served with vegetable salads. For example, one candidate wrote, *roasted meat, a fried food, meat pilau* and *chips*.

In part (b), some candidates provided the functions of specific nutrients found in vegetables in the body instead of the nutritive values of vegetable salads. The mentioned points included: *in digestion because of roughage, to protect the body from diseases, produce red blood cells in the body, to treat anaemia,* and *give the body vitamin C*. Others mentioned parts of plants that are used to make vegetable salads. A few candidates mentioned

types of vegetables which are commonly used to make salads such as, *cabbage, carrots, onions, tomatoes* and *cucumber*.

Some candidates who lacked knowledge on vegetables provided irrelevant responses in part (c) of this question. Others did not respond to this part. The candidates who showed inability in using English Language wrote ambiguous explanations on how to prepare raw tomatoes and lettuce for salads. Responses from a script of a candidate with poor performance is provided in Extract 7.2.

Extract 7.2

7 ai	Used to provide the body vitamins	
ii	Used to against disease	
iii	Used to build the body	
iv	Used to stimulate the body	
b i	Roots	
ii	Leaves	
iii	The body	
c i	Tomatoes there are vegetable and there are tomato there are child of the vitamin A are the tomatoes.	
ii	Lettuce there are raw vegetable and there are salad are the vita min	

In Extract 7.2, the candidate failed to respond correctly in any part of the question. He/she provided unclear responses in part (c) because of poor mastery of English Language.

2.2.6 Question 8: Kitchen and Food Hygiene

The candidates were required to differentiate food poisoning from food spoilage in part (a), while in part (b), they were required to briefly explain four means by which bacteria can be transferred to food. Part (c) required the candidates to state four kitchen hygiene rules to be followed in order to maintain food hygiene.

This question was attempted by 2,171 (98.3%) candidates. Data analysis indicates that 299 (13.8%) candidates scored from 6.5 to 10 marks. The candidates who scored from 3 to 6 marks were 1,252 (57.6%) whereas 620 (28.6%) scored from 0 to 2.5 marks. The performance for this question was good because 1,551 (71.4%) candidates obtained average marks and above. The performance for this question is summarized in Figure 8.
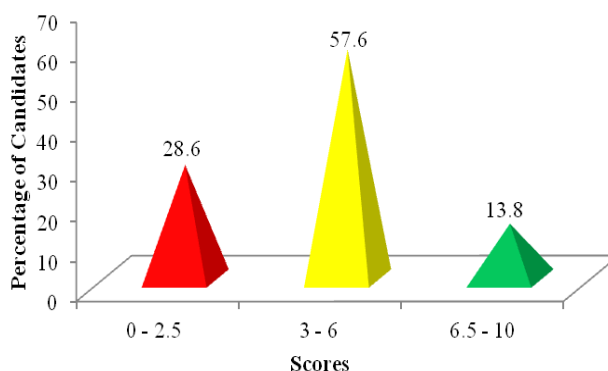

Figure 8: *The percentages of candidates' performance in question 8*

The responses analysis reveal that the majority of candidates who performed well in this question managed to differentiate food poisoning from food spoilage in part (a). They understood that food poisoning is an illness caused by intake of contaminated food, while food spoilage is deterioration of food which makes it not safe for human consumption. In part (b), most candidates explained the correct means by which bacteria can be transferred to food. However, some candidates mixed correct and incorrect kitchen hygiene rules to be followed in order to maintain food hygiene, hence failed to score full marks in part (c) of this question. Some of the incorrect rules provided by the candidates were: *bacteria may be present in food, the working table not well covered so provide a good environment for bacteria, when cooked foods are kept for long time* and *if*

drinking unboiled water. Responses from a script of one of the candidates with good performance is provided in Extract 8.1

Extract 8.1

8 (a) Food poisoning → Is the sickness which is caused by eating food which is contaminated	
while	
Food spoilage → Is the process tt or reaction where by food is not safe for human, the food becomes contaminated by bacteria or any other agent of food spoilage	
(b) (i) Through pests → Bacteria can be transfered through pests which carry bacteria, example flyes flies. Flies may carry bacteria and transmitt them into the food.	
(ii) Through contaminated water; contaminated water may tranfer bacteria to the food. and this is when the contaminated water is used in cooking or even in washing food ingredients which are used in preparing food.	
(iii) Through leaving food without covering → Once food is cooked it should be covered but once it is not covered bacteria may enter and contaminate it	
(iv) Through the use of dirt ut utensils when cooking → all utensils used in cooking should be well cleaned and this will prevent contamination but once the cooking utensils are not clean bacteria will contaminate food.	
(c) (i) Washing hands before starting preparing the food	
(ii) All areas in the kitchen which are used for preparing food should be well cleaned and cooked food should be covered.	
(iii) All left over foods should be kept in proper place and not left uncovered	
(iv) After preparing food utensils should be well cleaned and arranged well and every utensils should be kept in a proper place.	

Extract 8.1 shows a sample of correct responses from the candidate who scored high marks.

The candidates who scored below average in this question provided irrelevant responses due to either lack of knowledge on kitchen and food hygiene or misconception of the demands of some parts of the question. In part (a), the candidates failed to differentiate food poisoning from food spoilage. For example, one candidate wrote, *food poisoning is the types of food containing poison, while food spoilage is the type of food containing harmful microorganisms*. Another one wrote, *food poisoning is the process whereby the bacteria have entered in the food while food spoilage is a process whereby food is attached by microorganisms*. Others differentiated the terms by mentioning the foods which can easily be poisoned and spoiled.

In part (b), the candidates failed to demonstrate their understanding on how bacteria can be transferred to food, as a result they provided unrelated responses. Some candidates mentioned the organisms which cause diseases. For example, one candidate wrote, *anopheles mosquito, worms, cholera bacteria* and *fungus.* Others mentioned the diseases which are caused by bacteria like: *cholera, typhoid, diarrhoea, TB, syphilis* and *gonorrhoea.*

In part (c), some candidates explained the ways of preventing accidents in the kitchen. For example, one candidate provided the following points: *handle hot foods carefully with kitchen cloth, when the floor in the kitchen is wet one must rub it in order to prevent accident like falling, make sure you arrange well the kitchen equipments* and *close all windows and door to prevent insects*. Those who had insufficient knowledge on kitchen and food hygiene provided irrelevant rules using poor English Language grammar. Extract 8.2 displays a sample of candidates' incorrect responses.

Extract 8.2

	IV) when the food do not be close bacteria can be transfered to food	
	C) is To keep food on a good place	
	II) To store food on a dry place	
	III) To avoid keep a food in a moist area	
	IV) Avoid using of reagent which make food spoilage very faster	

Extract 8.2 reveals a sample of responses from the candidate who had insufficient knowledge on kitchen and food hygiene. The candidate provided responses which does not relate to the demands of either part of the question.

2.3 Section C: Essay Questions

This section consisted of three essay questions composed from the topics of *Malnutrition, Feeding the Baby* and *Early Marriage*. Each question carried 20 marks. Candidates were required to answer only one question.

2.3.1 Question 9: Malnutrition

In this question, the candidates were required to support the statement; "Obesity is one of the nutritional disorders that can lead to the occurrence of other diseases" by explaining three causes of obesity in part (a), three diseases associated with obesity in part (b), and three measures to be taken in order to prevent obesity in part (c).

This question was opted by 455 (20.6%) candidates. This means 1,754 (79.4%) candidates did not go for it. The analysis of performance shows that 142 (31.2%) candidates scored from 13 to 18.5 marks and 241 (53.0%) scored from 6 to 12.5 marks. Those who scored from 0 to 5.5 marks out of 20 were 72 (15.8%). This suggests that the candidates' performance in this question was good because 383 (84.2%) scored from 6 to 18.5 marks, as Figure 9 illustrates.
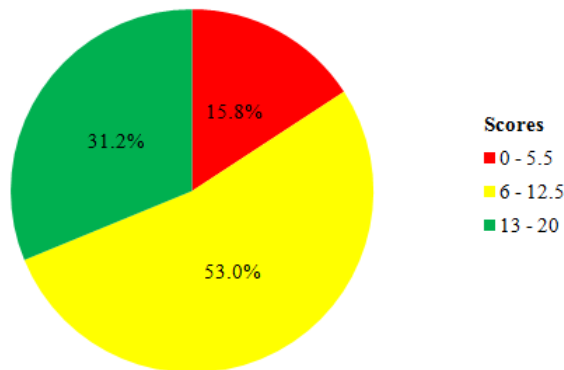
31

Figure 9: *The percentages of candidates' performance in question 9*

The candidates who scored average and beyond in this question were able to give correct causes of obesity and the diseases associated with it. Such diseases are: *heart disease, high blood pressure, diabetes* and *stroke*. The candidates were also able to give the practical measures to prevent obesity which included: *by doing physical exercises, reduce consumption foods rich in energy* and *eating balanced diets*. This implies that the candidates had adequate knowledge on the tested concepts which are taught under the topic of Malnutrition. They also showed mastery of good essay writing skills. Extract 9.1 is a sample of a response from a script of a candidate with good performance.

Extract 9.1

Lack of body exercises, Is the situation when a persons body is just resting with, without making it more active by running, walking or playing food ball or other sports games. Hence you found a person sleeping every time with no job to carry on hence the body become lazy and fat.

Inheritance, Is the condition when the gene of obesity are passed from father or mother to the baby. If the family has the history of people who are obesity has kid you are likely to obtain or inherity from your relative hence a person is bone fatty from her relative.

Diseases associated with obesity are has follow;

Blood Pressure, most it is high blood pressure Is the situation where the heart Is forceful to produce blood in high pressure and also because the person body has alot of fat some tend to block the blood streams vessels hence the blood passed with high pressure.

Diabetes Mellitus, Is caused when insulin fails to control amount of sugar in the body's blood. It divide in two type TYPE I and TYPE II diabete Millitus. When a person becames obesity the level of sugar in the body rise hence he/she is likely to be patient of diabetes

Heart Failure, Is the condition when the heart is not working properly or function well. When a person becomes more obesity he/she get heart diseases because he back exercise and fatty accumulated in blood streams makes difficult for the blood to be manufactured and transported easily hence a person's heart becomes weak and time come when it fails use of more energy to run his activity.

In order to prevent Obesity we have to do the following;

Regular body activities/exercise, In order for a person to escape from obesity he/she has to do regular body exercise very day and avoid over sleeping and resting too much instead he/she carry on the body exercise to reduce the fatty accumulated in the body.

Proper Feeding method and time table; has we have seen that a person must have proper feeding time table and not every time that he/she has to feed up everything instead in time table and not too much food but should be balanced and well cooked

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C	Avoid to much sweet, fat and Junk food e.g chips. you are recomanded that you shouldn't take every day too much sweet, fat and Junk food inorder to keep your body at right size and shape because sweet and fat foods makes a person obeuity. Obeuity oan be controlled If one eat according to the time table, carry on body exeruive and avoid eating junk food, Obeuity can lead to strock, pressure and diabetes If not controlled.	

Extract 9.1 shows the responses from the candidate who managed to explain the causes of obesity, diseases associated with obesity and measures to prevent obesity, thus scored high marks.

On the other hand, the analysis shows that the majority of candidates who scored low marks misunderstood the demands of the question, thus, provided irrelevant responses. These candidates considered obesity as undernutritional disorder instead of overrnutritional disorder. They therefore, provided the causes of undernutrition, examples of undernutritional deficiency disorders such as *marasmus, anaemia, pellagra, kwashiorkor* and *scurvy*, and measures to prevent undernutrition in parts (a), (b) and (c) of the question respectively. The candidates who scored from 1 to 5.5 marks (11.6%) managed to provide at least one correct point in each part, but failed to give correct explanations. For example, one candidate mentioned *by including small portions of fat and starch in your meals* as a measure to prevent obesity but wrongly stated that, *one should eat much proteins, vitamins C, minerals and water and avoid sugar, starch and fat foods because do not make balanced meals*. Extract 9.2 shows a sample of a response from a candidate who scored low marks in this question.

Extract 9.2

9	Obesity Malnutrion are the increase or de crease of nutrient in the body. This caused they deseses. like Obesity, marsums, Richet and kwashiokor.
	Obesity is the increase of nutrients in they body expecall carbohadrate this can caused a persc to have obesity. They following are they cau sed of Obesity.
	poverty is they situation of they person ca n not afford basic need such as food, sheltera nd clothers due to this point they person can ge t obesity due to was not having enogh food to r by food so they can eat one diet every day this caused a person to be have Obesity
	Ingnorance due to this point they people can not get obesity because of Ingnorance they did not now the arrengement of food.
	poor diet due to this point They people can not eat balalnce diet so this can Coosed to be having the Obesity or either disicast like marasm kwashiohor and richet.
	lach of education due to this point The many people have malnutrition because of poor educ ation they did not now how can arrenged the food property and cutting balanced bi diet and the im portance of balanced diet.
	They following are they disicast associated with obesity
	Richet is the lach of Vitamin A in they body this caused person by the lacked of Vitamin A in they body caused they disease ter Richet.

9	Marasmus is the malnutrition disorder w	
	hich coused by lack of nutrient in they body this	
	can cause # marasmus.	
	Kwashiokor this are malnutrition disorder	
	which cause # by lack of vitamin in the bo	
	dy so this thia can coused the deseaur in	
	the body.	
	The following are measures to be taken i	
	nder to prevent Obesity.	
	provision of education this is among of	
	measure used in to be taken to prevent Obesit	
	y due to the provision of education # man	
	y people can know importance of balanced di	
	# and can eating	
	Eating of proper diet due to this	
	point due to eating of balanced diet no one	
	can get disease so they every one can ea	
	ting balanced diet to correction proposion	
	provision of employment due to emplo	
	mte people can get money inoder to by th	
	e by food and te it can heip to eating th	
	e balanced diet in the correct put one er	
	eone can eating balance diet becouse was ha	
	ve many for by that food.	
	Malnutrition was increase or diereuse	
	of food nutrient in they body this is esp	
	ecall for the children under 5 years old and	
	pienyant mothe old peseon they disease is	
	due to lack of nutrient on decreaur of n	
	utrient in the body.	

In Extract 9.2, the candidate performed poorly in this question because he/she responded contrary to its demand.

2.3.2 Question 10: Feeding the Baby

This question required the candidates to explain four advantages of weaning and six rules to be observed during weaning.

The analysis indicates that this question was chosen by very few, 388 (17.6%) candidates of which 23 (5.9%) scored from 13 to 15.5 marks and

256 (66.0%) scored from 6 to 12.5 marks. The candidates who scored from 0 to 5.5 marks out of 20 were 109 (28.1%). No candidates who scored above 15.5 marks. Generally, the performance for this question was good since 279 (71.9%) candidates scored from average and above. Figure 10 is an illustration of the performance.
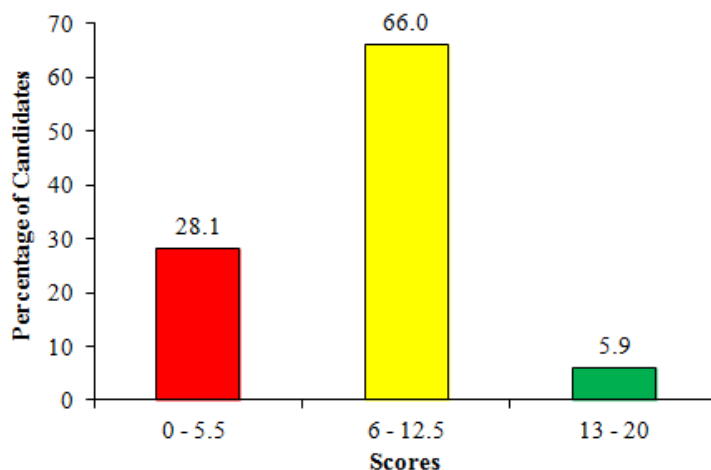

Figure 10: *The percentages of candidates' performance in question 10*

The response analysis indicates that the candidates who performed well in this question had adequate knowledge on weaning. They might have also adequate practical experience gained from their families since weaning is done at the family level. This enabled them to correctly give the advantages of weaning which were: *mothers get enough time to rest, weaning food supplements the nutritional needs of a growing child* and *it provides support to the child's health during sudden illness*. The candidates were also able to give the rules to be observed when weaning. For example, one candidate wrote the following rules: *introduce new food early in the morning as this will help to observe any reaction which may develop due to eating new food, do not force the child to eat, introduce small amount of food at first and then you increase the amount gradually, the weaning food should be soft and nutritious, weaning foods must be changed for the baby to be familiar to different foods* and *breast milk or artificial milk feeding should be given to the child after feeding him.* However, the majority of candidates scored average marks because they either failed to provide the required number of correct points or provided insufficient explanations to some of the mentioned points. Extract 10.1 shows a sample of correct responses from one of the candidates with good performance.

Extract 10.1

10. Weaning is the gradual introduction of solid food other than mothers milk in order to suppliment the mothers milk. eg: gradual weaning, abrupt weaning and natural weaning.

The following are some of the advantages of weaning the baby:-

To suppliment the mothers milk, as we are aware that weaning is the gradual introduction of new solid food rather than mothers milk thus in doing so we are able to suppliment mothers milk.

To provide the child with an experience early of solid food, Weaning practice normally is done by the people of urban areas than rural areas. They buy them some fruits and other smooth food so as they can make the child to have an experience to solid food.

Weaning does not Fatique the mother, Always breastfeeding is supposed to be done every time as the baby become hunger thus the mother is Fatique but when you have Introduced other solid food rather than mothers milk the mother can not severely Fatigued

It gives a chance to the mother to go to her work place even if it is Far, Weaning the baby can enable the mothers to travel Far away to her work place and allowing breastfeeding either once or twice per day eg:- gradual weaning.

The following are the roles to be observed when/during weaning:-

Introduce a little food and see the result, The food of the child must be of small amount so as to see the result if he/she can eat the food or refuse to eat that food.

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10 The Food must be atleast in pulp form, the form of Food should be in pulp Food in order to be easily digested as his/her digestive organs are steel soft	
Introduce a new Food at a time before 10:Am so as to observe the reactions taking place, Another Food must be introduced before 10:Am so as to observe any reaction which might take place on the day time.	
Do not use Force, When weaning the baby you are supposed to be calm a lot as the child child can agree to eat on the next days. When you force the baby he/she can hate u and refuse that Food.	
Give the baby fruit juice and water between the meal, the baby is supposed to be provided water and fruit juice if possible between the meal.	
Breasfeed or bottle feed the baby after every meal, the mother must feed the baby either breastfeeding or bottefeeding after every meal so that to accomplish his/her diet and provide relationship between her mother and the child.	
In general, weaning the baby can not only decided by personal willingness but also can be due to Unwillingness reasons such as death of the mother can lead to weaning of the baby.	

Extract 10.1 shows the responses from the candidate who scored good marks. The candidate failed to score full marks because he/she provided two out of four correct advantages weaning required.

Candidates who scored below average provided irrelevant responses due to inadequate knowledge on the concept of feeding the baby particularly on weaning practice. Some candidates provided the functions of food in the body instead of the advantages of weaning. For example, one candidate wrongly explained how *to give the body energy, to produce body cells, for growth, for the body repair* and *to give good body health* are facilitated by weaning foods. Moreover, other candidates thought that, *to develop the child's ability to understand the world, to increase more weight, to change the living environment, help the baby stop breastfeeding* and *mother get chance to find another child* are some of the advantages of weaning, which is not true. A few candidates managed to mention at least one correct rule to be observed during weaning, hence scored from 1 to 5.5 marks. Some

candidates in this category mentioned a variety of incorrect weaning rules due to insufficient knowledge on the concept of weaning. Others provided hygienic rules to follow when preparing and cooking food. The hygienic rules provided by these candidate included: *clean equipment and utensils thoroughly, remove deteriorated food from the kitchen to prevent it from contaminating other foods, nails should be cut short, use safe water for washing and cooking foods, hands, utensils and equipment, do not leave cooked foods to stay for a long time in the kitchen, protect foods and water from insects and other animals to prevent contamination, do not mix raw and cooked foods* and *a sick person is not allowed to prepare and cook food*. Extract 10.2 shows an example of irrelevant responses provided by one of the candidates.

Extract 10.2

10. Weaning: Is the time when a mother stops breast feeding her baby being considering that the child is able to cope up with the environment is in. The following are the advantages of weaning.

Weaning gives a child courage to be used of the environment that is in. This helps more, since the child is being left with her sisters who will make her to play alone, and be used with the environment. Also this helps a baby to determine herself/himself and to know some words from her sisters or brothers.

Weaning gives a chance to the child to participate in different games. Through participating in different games she is able to strengthen her body. This makes a child to enjoy staying with other children more than staying at home depending on her mother.

Weaning helps a child to learn some habits from the environment is in. She/he gets to know which habits are good and which ones are bad. Since she is being exposed much to the environment that will help him/her to differentiate. Not only advantages of weaning but there are rules to be observed during weaning.

The weaning food should be provided before the meal. This enables a child to cool down her/his

10. hunger, since the main meal is to be served at around 9:30am or above. So inorder for the child the not to feel hungry her food should be provided the time before the main meal.

Weaning tools should be clean and safe, This encourages the hygiene of the child since she/he needs clean utensils that will prevent her/his body from being affected by the diseases.

Weaning foods should be in liquid form This is whereby a baby is being still has not yet grown teeth. So once is given solid foods can not be able to chew. So inorder to avoid this the food to be given should be in liquid form which includes mashed bananas, porridge, tea (milk).

Weaning foods should be balanced. since a growing child needs balanced meals for the well growth of the body, So when preparing food for weaning proteins, vitamins and carbohydrates shall be considered for the child.

Weaning foods should not be too cold or too hot. This is whereby cold foods is not good for the child since it contains some bacteria which needs to be destroyed through warming also hot foods are not good totally for the child, since they can lead to the burning of the mouth part of the child.

Weaning foods should not contain too much sugar and salt. Since the two seasonings are chemicals in nature. So they can lead to poor growth of the child also can lead to cancer once the child is mature enough. Also Sugary foods makes the teeth not to grow well. Since they destroyes them.

In Extract 10.2, the candidate provided incorrect responses on the advantages of weaning and rules to be observed during weaning because of insufficient knowledge.

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2.3.3 Question 11: The Early Marriage

In this question, the candidates were required to explain in detail six social cultural factors that encourage early marriage, and three reproductive health problems which are associated with early marriage.

This question was chosen by 1,358 (61.5%) candidates. This means 851 (38.5%) candidates did not attempt this question. The question had good performance because 1,088 (80.1%) candidates scored 6 marks and above out of 20. The analysis indicates that 224 (16.5%) candidates scored from 13 to 19 marks, while 864 (63.6%) scored from 6 to 12.5 marks. The candidates who scored from 0 to 5.5 marks were 270 (19.9%) and no one scored full marks. Figure 11 illustrates this performance.
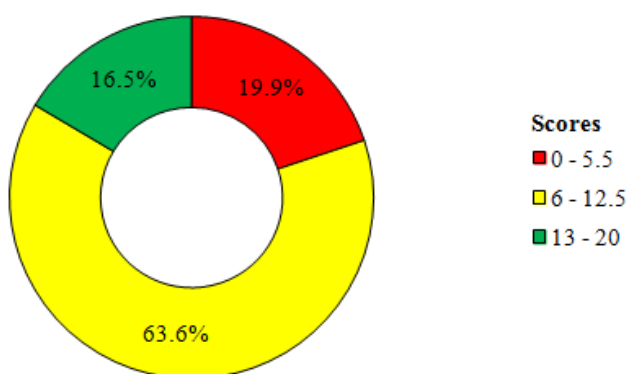

Figure 11*: The percentages of candidates' performance in question 11*

The analysis of responses indicate that many candidates who scored average and above in this question had adequate knowledge and experience of early marriage practices through media and from the community. The good performance could also be contributed by this topic being taught in Civics subject. The candidates were able to correctly explain the socio-cultural factors that encourage early marriage such as, *poverty, customary laws, peer pressure, to get respect in the community, early pregnancy, family pressure, irresponsible sexual behaviours among adolescents, to secure courtship* and *ignorance*. The candidates were also able to analyze the reproductive problems associated with early marriage which included: *complications during delivery such as anaemia and toxaemia, low birth weight, premature birth, stillbirth* and *fistula which is due to prolonged*

labour. However, some candidates could not score higher because they failed to provide the required number of correct points in all parts of the question. Extract 11.1 shows a response from a script of a candidate with good performance.

Extract 11.1

1 1	Early marriage is the marriage which take place when a partner is not well mature physically, mentally socially and economically. It take at age below 18 years. There are social cultural factors which encourage early marriage. These are as follows;
	Poverty. In some families they want their child to be married so that they can get money through the bride price given. This is due to poverty that they allow their child to get married with a well and wealth man.
	Customary law. Some customs make the family to decide that their child has to marry. In some of the customs they say that a child of 16 years has to get married so due to customs it enforce a girl child to get married elier
	Peer pressure. This is due to the company that a child has. When all his or her friend have marry they get also influence from their friends hence marry at young stage.
	Early pregnance. This affect mostly the child as the parent will force the girl to be married by the man who they have a child to aather so as to remove shame

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Lanfranco. The parent they lack knowledge of the effect of the earl y marriage together with their child hence they continue practicing early marriage.

Security. Some people see that when they marry they will have securit y especially girl child agaist unwant ed pregnancies hence their parent let them married at young age.

There are reproductive health problem reculting from early marriage. These are as follows.

Complication during delivery. Since the mother is very young the reprodu ctive system are also young hence diffi cult for the mother to remove the baby during delivery

Many child at short interval. Since the mother lack a knowledge a bout family planning who will get many children at short time

The mother may get diseases associated with the reproductive syst eam like stomach pain and removal of urine unconsious. This result due to problems when delivering and gast ation period.

Therefore society at large should be educated about the effect of early marriage and discourage the customs which influence it

Extract 11.1 shows a sample of responses from the candidate who was able to provide correct social-cultural factors that encourage early marriage. He/she also provided correct reproductive health problems which are associated with early marriage. The candidate however showed mastery of good essay writing skills.

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It was observed that, 270 (19.9%) candidates performed poorly in this question due to inadequate knowledge on the topic of early marriage. They provided a variety of irrelevant responses which do not relate to the demands of all parts of the question. Some candidates provided irrelevant socio-cultural factors that encourage early marriage such as, *female circumcision, wife inheritance*, *bride price to woman, gender discrimination, genital female mutilation, regarding women as sex object,* and *polygamous marriage.* The candidates also gave irrelevant reproductive health problems which are associated with early marriage. For example one candidate wrote; *spread of diseases such as syphilis, gonorrhoea and HIV/AIDS, high blood pressure* and *health problems due to ignorance and poverty.* Another candidate wrote, *marriage separation, bad health* and *child labour.* Other candidates in this category provided few correct points with meaningless explanations, hence scored low marks. A response from a script of a candidate with weak performance is provided in Extract 11.2.

Extract 11.2

11	Social-cultural factor are those factor That there practice in our communities. theo social cultural practice good at and bad so the bad social cultural factor are those cultural which are not acceptable in the society or community. The following are the social cultural factor that encourage early marriage in the society
	Female genital multilation, this it practise in the community and there society there practise this female genital maltilation and This can can cause delivery effect during delivery so people should be educated for this problem
	Polligamy, this it cane be factor that encourage early marriage because there same people there marry live's and he did not supply social services for them so this can cause street children, it can cause disease and many problems so the people should marry one wife

Full marriage. there some people there force there child to get marriage which while there children are still young so there get marriage in small age and there get pregenancy That can cause problem during birth of child so this factor can encourage early marriage.

Wife inheritance, this ett it can be factor that encourage early marriage because there some tribles which there have rule tradithinal beliefs and there practice so that can cause and to be factor that encourage early marriage in couety and communidy.

Early Marriage. this can be there some tammily there get their child to get marriage in the when they young and there going to engaage the marriage still their going so this can be factor that encourage searly marriage ine our souet ind healthly.

Food tabous, theory, some tribles there tell Pregnanty that does not eat food which have high quality like chicken, fish, meal, egg While this food there have protein that protect mother and her children to geet good health so this can be factor That encourage early marriage in their health of people

Therefore there people they should know There health inorder to know that There sick or There health is good and do get art practise That encourge ealy marriage to the health.

In Extract 11.2, shows the answers from the candidate who provided incorrect response because of lack of knowledge on the concept of early marriage. The candidate also demonstrated a poor command of English Language.

3.0 PERFORMANCE OF CANDIDATES IN EACH TOPIC/QUESTION

The performance of candidates is clustered in three groups namely, good (65 to 100 %), average (30 to 64 %) and weak (0 to 29 %). These clusters are represented in figures and appendix A by green, yellow and red colours, respectively. The analysis indicates that the overall performance was good because 98.55 percent of the candidates who sat for this examination passed.

The analysis in each question shows that 9 questions had good performance. The number of questions and the candidates' performance for each in percentages are: 5 (95.6%), 7 (92.0%), 9 (84.2%), 1 (82.0%), 2 (81.8%), 11 (80.1%), 10 (71.9%), 8 (71.4%) and 4 (65.9%). These questions were composed from the topics of *Packed Meals, Vegetables and Fruits, Malnutrition, multiple choice items from various topics, Kitchen Planning (matching items), Early Marriage, Feeding the Baby, Kitchen and Food Hygiene* and *Food Preservation*. Good performance in these questions is attributed to the ability of the candidates to understand the requirements of the questions, and the possession of a wide knowledge and practical skills of the topics on which the items were set.

Further analysis shows that two out of the six short answer questions had average performance. They include question 6 (57.0%) and question 3 (39.3%). Question 6 was composed from *Cleaning Agents* topic and question 3 from *Food and Nutrition* topic. The average performance observed in these questions has been associated with the following limitations: inability to understand the requirements of the questions, poor proficiency in English Language and insufficient knowledge of the tested concepts. The analysis of candidates' performance per topic in each question is summarized in appendix A.

4.0 CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The analysis of the Certificate of Secondary Education Examination (CSEE) 2018 in Food and Nutrition subject has exposed the strengths and weakness of the candidates in answering the questions. The performance was good since 98.55 percent of the candidates passed the examination by scoring grades A, B, C and D. This performance was better compared to that of 2017 by 0.4 percent. The comparison of the performance of the candidates in CSEE 2017 and 2018 is presented in appendix B.

The analysis of candidates' performance in each question indicates that the good and average performances were due to the ability of the candidates to identify the requirements of the questions, and the possession of adequate knowledge and practical skills. Moreover, it has indicated that some candidates failed to understand the instructions of the questions, had low English Language proficiency and lacked some basic knowledge on Food and Nutrition concepts. These hindered them from scoring good marks in some questions. Therefore, teachers, students and other education stakeholders should address such problems so as to raise the standard of education in the country.

4.2 Recommendations

In order to promote good performance in Food and Nutrition in CSEE, the following should be addressed.

(a) Teachers should teach all topics thoroughly with the emphasis on both theory and practical lessons to meet the set objectives.

(b) Students should be provided with sufficient homeworks, exercises and tests to enable them revise all the topics stipulated in the syllabus. Teachers should mark tasks they give students and provide feedback.

(c) Students should be reminded to read the questions carefully and observe the instructions given in each question during examinations. This will enable them to answer the questions according to the requirements.

(d) Students should be encouraged to use English Language in their day to day communications, build a habit of reading different academic books, and participating in English Language debates and essay writing competitions in order to improve their proficiency in English Language.

(e) Teachers should use various teaching and learning methods that are student centred in order to increase students' understanding and competency.

Summary of Candidates' Performance in each Topic/Question

S/n	Topic	Question Number	The % of Candidates with Score of 30% and Above	Remarks
1.	Packed Meals	5	95.6	Good
2.	Vegetables and Fruits	7	92.0	Good
3.	Malnutrition	9	84.2	Good
4.	**Multiple Choice Items** Public Health Services, Laundering in the Home, Beverages, Methods of Cooking, Meat, Pastry, Eggs, Packed Meals, Cereals, and Food Preservation	1	82.0	Good
5.	**Matching Items** Kitchen Planning	2	81.8	Good
6.	Early Marriage	11	80.1	Good
7.	Feeding the Baby	10	71.9	Good
8.	Kitchen and Food Hygiene	8	71.4	Good
9.	Food Preservation	4	65.9	Good
10.	Cleaning Agents	6	57.0	Average
11.	Food and Nutrition	3	39.3	Average

The Comparison of Candidates' Performance in 2017 and 2018