

THE NATIONAL EXAMINATIONS COUNCIL OF TANZANIA



**STUDENTS' ITEM RESPONSE ANALYSIS
REPORT FOR THE FORM TWO NATIONAL
ASSESSMENT (FTNA) 2015**

051 FOOD AND NUTRITION

THE NATIONAL EXAMINATIONS COUNCIL OF TANZANIA



**STUDENTS' ITEMS RESPONSE ANALYSIS
BOOKLET FOR FORM TWO NATIONAL
ASSESSMENT (FTNA) 2015**

051 FOOD AND NUTRITION

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ABBREVIATIONS

BCG Vaccine	Bacillus Calmette-Guérine Vaccine
DPT Vaccine	Diphtheria Pertussis and Tetanus Vaccine
FTNA	Form Two National Assessment

FOREWORD

The National Examinations Council of Tanzania is pleased to issue the 2015 Form Two National Assessment (FTNA) report on the students' items responses analysis in Food and Nutrition subject. This report has been prepared so as to provide a feedback to students, teachers, school managers and administrators on the performance of students in this subject. The report focuses on identifying and highlighting the strengths and weakness of students' responses in different examined topics which were covered by the students in their two years of Secondary Education. It also point out areas which need improvement and suggests measure to be taken by teachers and students can take to improve teaching and learning process.

This report provides some of the reasons that made the students fail to score high marks in the questions. Such reasons include: failure to recognize the task of the question, poor English Language command and lack of knowledge on the concepts related to the subject. The Council believes that this report will enable the educational administrators, school managers, teachers and students to identify proper measures to be taken in order to equip the students with appropriate knowledge and skills before sitting for the Form Four National Examination. In addition, the Council hopes that if the recommendations given in this report will be addressed accordingly, there will be a change in learning that will lead to greater performance in the future assessment.

Finally, the National Examinations Council of Tanzania would like to thank everyone who participated in the preparation of this report. The Council will also appreciate to get suggestions and recommendations from the teachers, students and other stakeholders which will help to improve future assessment reports.



Dr. Charles E. Msonde
EXECUTIVE SECRETARY

1.0 INTRODUCTION

This report analyses the students' performance in Food and Nutrition subject who sat for Form Two National Assessment (FTNA) in November 2015. The paper assessed the competences acquired by students after completing two years of study in ordinary level in accordance to the Home Economics Syllabus for Secondary Education of 1997.

The paper comprised of nine (9) questions which were distributed in three (3) sections: A, B and C. Section A and B were compulsory. Section A consisted of two (2) questions each carried 10 marks. Section B consisted of four (4) short answer questions which carried 15 marks each. Section C consisted of three (3) essay questions of which students were required to choose one question. Each carried 20 marks.

A total of 7990 (95%) students sat for this paper, of which 2940 (36.8%) students passed the assessment with the following grades: A (0), B⁺ (1.39%), B (13.71%), C (36.16%) and D (48.74). However, 5050 (63.2%) failed. This implies that the performance of this paper was poor. The comparison analysis in 2014 and 2015 indicates that students performed poorly in 2015 as compared to 2014 as seen in Appendix 2.

This report provides analysis of students' performance in each question. The question is graded as poorly performed (weak) if the student scored 0 - 29, an average performed if scored 30 - 49 and good performed if scored 50 - 100. This report significantly highlights the demands of the questions, misconceptions observed and the possible reasons for poor and good performance. The extracts of students' answers, charts and graphs have also been inserted in appropriate sections to illustrate the respective cases.

2.0 ANALYSIS OF THE STUDENTS PERFORMANCE IN EACH QUESTION

2.1 Section A: Objective Questions

2.1.1 Question 1: Multiple Choice Items

This question consisted of 10 multiple choice items derived from nine topics which are *Children Ailments*, *The Adolescent*, *Cooking of Food*,

Refuse Disposal, Food, Good Grooming and Laundry in the Home, First Aid and Cleaning Agents. The students were required to choose the correct answer among the given alternatives and write its letter in the box provided.

The question was attempted by 95 percent of the students, whereby 12.5 percent scored from 0 to 2 marks, 33.7 percent scored from 3 to 4 and 53.8 percent scored from 5 to 10 marks. However, very few (0.03%) students did not answer the question. This data analysis shows that the performance of this question was good since majority (87.5%) scored between 3 and 10 marks as illustrated in Figure 1.

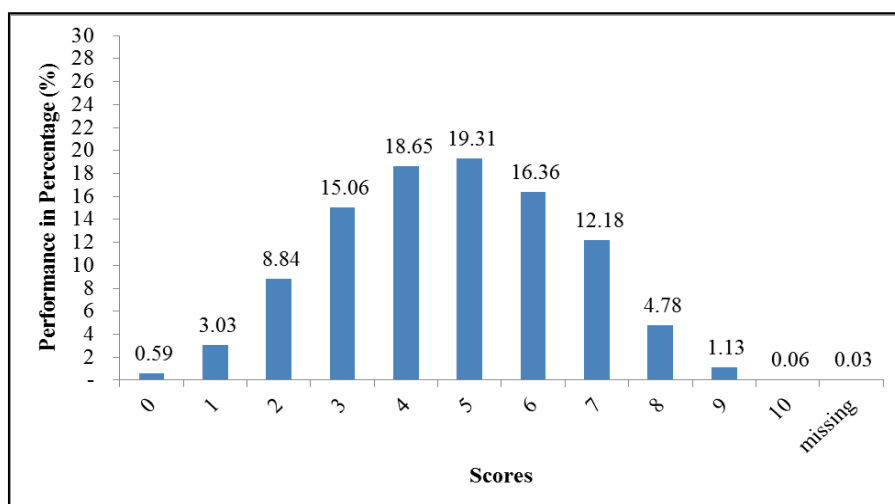


Figure 1: Distribution of Students' Scores

In item (i) the students were required to identify the diseases that can be prevented through immunization. The correct answer was B - *measles, poliomyelitis, and diphtheria*. The students who chose this response understood the types of diseases prevented through immunization. The students who selected A, C and D were not aware that malaria, anaemia, kwashiorkor and asthma are not prevented through immunization. These students lacked enough knowledge on the diseases that need vaccination.

In item (ii) the students were required to identify the developmental stage range which adolescence fits. The correct answer was A - *childhood and adulthood*. The students who chose this response understood that adolescence is a transition period of growth between childhood and adulthood. The students who opted for B, *infantile and childhood* were not

aware that infantile are very young babies, aged between 0 to 2 years. The students who opted for C - *Toddler and adulthood* were not aware that toddler is a child between the age of 1 and 3 and those who opted for D, *foetal and childhood* were not aware that foetal is a prenatal or antenatal period (pre-birth), the period from fertilization to birth. These students had inadequate knowledge on the meaning of adolescence.

In item (iii), the students were required to identify a part of meat suitable for grilling. The correct answer was C - *Tender cuts*. These students understood that tender meat is the one which is easily cooked and remains soft after cooking, thus can be suitable for grilling. Students who opted for A – *Boneless cuts*, B - *Fatty cuts*, D-*Tough cuts*, did not understand that, any kind of meat to be grilled should be tender; if not it should be tenderized in a marinade for a few hours or overnight. The students who failed to choose the correct answer had inadequate knowledge on cuts of the meat and their suitability in cooking.

In item (iv) the students were required to identify a name given to refuse from water closets, laundry and baths. The correct response was B - *liquid refuse*. Students who opted for this response had adequate knowledge on the kinds of refuse and methods of disposing. Students who opted for A - *mixed refuse* confused the word “mixed” with the refuse which comes from water closets, laundry and baths and thought that the refuse are mixed somewhere thus called mixed refuse. Students who opted for C - *house liquid* thought that since the water closets, laundry and baths are the part of the house, then refuse that come from those areas are termed as house liquids. Furthermore, those who opted for D - *unused liquid*, understood that refuse from water closet, laundry and baths are unused liquid, thus they failed to understand that they are termed as liquid refuse.

In item (v) the students were required to identify nutrients which are mainly found in fruits and vegetables. The correct answer was D *minerals and vitamins*. The students who opted for the correct answer were aware that minerals and vitamins are the main nutrients found in vegetables and fruits. The students who opted for B - *roughage and minerals* were attracted by the term roughage because it is also found in fruits but the demand of the question was to identify the main nutrients. Students who opted for A – *water and protein* and D - *vitamins and protein* did not understand that

fruits and vegetables are not the main source of water, carbohydrates and protein. These students had inadequate knowledge on the food nutrients.

In item (vi) the students were required to identify the proper way of taking care of the teeth. The correct answer was C - *Have regular dental check-up*. The students who answered the question correctly were aware that regular dental check-up is important for caring of the teeth because it makes it possible for the teeth to last long. Students who opted for A - *Brush by using modern tooth paste* were not aware that the best tooth paste contains fluoride which prevents tooth decay and cavities and not just modern tooth paste. Students who opted for B - *Encourage chewing solid foods* were aware that chewing solid foods helps to strengthen the jaw muscles and has no relationship with caring of the teeth. Also those who opted for D - *Avoiding drinking mineral water* had little knowledge on the importance of mineral water in caring of the teeth since water with natural minerals such as fluoride makes the entire teeth structure more resistant to decay though the excess of fluoride in water may cause dental fluorosis. These students had inadequate knowledge on the basic dental care.

In item (vii) students were required to identify a laundry stage which aims to improve colour on white articles. The correct answer was B - *Bleaching*. The students, who answered the question correctly, understood that bleaching is used only on white or discoloured articles to improve the colour. However, some students opted for A - *Blueing*, the process used to improve colour on white articles and dark colours such as grey, navy and black. These students did not remember that the question was aimed to improve colour on white articles only. Students who opted for C - *Stiffening* had little knowledge on laundering activities since stiffening is done to improve colour but is also for restoring natural stiffening to materials which has lost it during washing. Students who selected D - *Re-colouring*, related it with the word colour from the stem hence thought that it is the correct answer. The analysis further shows that, these students did not understand the meaning of re-colouring clothes since it is not a laundry process but it is commonly used to update colour of the wardrobe especially stained and faded clothes. These students had inadequate knowledge on the finishing processes in laundry work.

In item (viii) the students were required to identify the statement which was not the aim of first aid; the correct answer was A - *Finding the course of accident*. The students, who selected the correct answer, were aware that first aid is provided for the aim of preventing further damage, saving life of victim and reliefs pains. However, those who failed to choose the correct answer had inadequate knowledge on first aid. Students who opted for B - *Prevent further damage* failed to relate the word injury and damage thus selected it as the correct answer. The students who opted for C - *Save life of the victim* and D *Relief pains* overlooked the word “not” in the stem thus chose the statements which are the aims of first aid instead of the one which is not the aim of first aid.

In item (ix) students were required to identify the effect of using soda in aluminium, the correct answer was D - *It dissolves the metal and turns it black*. The students who selected this response, were aware that aluminium is affected by alkali and washing soda is a strong alkaline substance thus, not suitable for cleaning aluminium utensils. Students who opted for A - *It scratch and chip the metal*, confused washing soda with hard abrasives substances which if used on metals such as chromium, gold or nickel utensil tend to scratch it. Students who opted for B - *It soften the metal and make it light*, did not understand that soda cannot soften aluminium and make it light but aluminium in nature is soft and has light weight. Those students who opted for C - *It discolour the metal and make it rusty* had little knowledge on the cause of rust since rust on metals is caused by oxygen reacting with water.

In item (x) the students were required to identify the disease which is caused by lack of thiamine. The correct answer was C - *Beriberi*. The students who opted for this response understood that beriberi is caused by deficiency of thiamine in the diet. The students who opted for A - *Rickets*, did not understand that lack of vitamin D causes a disorder called Rickets and this is common in children. Students who opted for B - *Pellagra* were not aware that deficiency of niacin (Vitamin B₃) causes Pellagra. Those students who opted for D - *Scurvy* did not understand that deficiency of vitamin C causes scurvy. The students who failed to select the correct answer had inadequate knowledge on the functions of Vitamins and their deficiency disorders.

2.1.2 Question 2: True and False Items

This question consisted of 10 True and False items derived from 10 topics which are *Feeding the Baby, Accidents in the Home, Baby Clinic, Cooking Foods, Good Manners, Food, Grooming, Cleaning a House, An Ideal Home and Expectant Mother*. The students were required to write TRUE if the statement is correct and FALSE if the statement is not correct in the space provided.

The question was attempted by 99.9 percent of the students while 0.1 percent (4 students) did not attempt the question. Generally, the performance of this question was good as 1.7 percent scored from 0 to 2 marks, 12.7 percent scored from 3 to 4 marks and 85.5 percent scored from 5 to 10 marks. Figure 2 illustrates the distribution of students' scores.

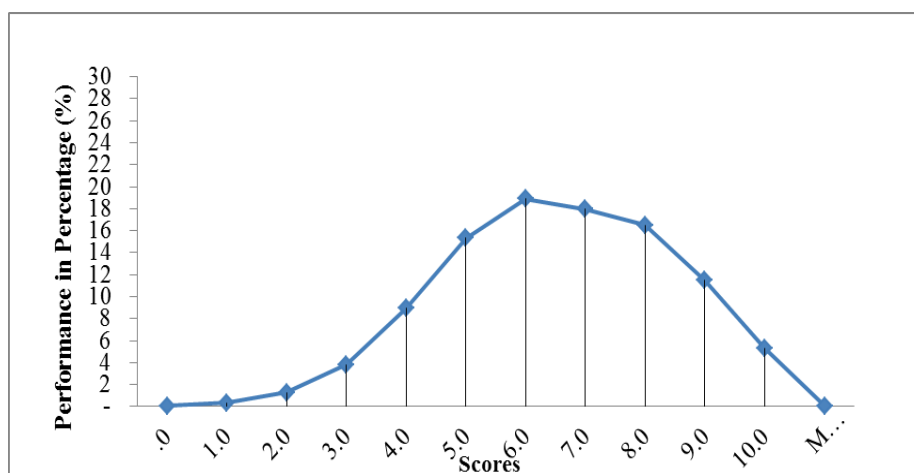


Figure 2: Distribution of students' scores

Item (i) required the students to agree or disagree with a statement *Breast feeding should be stopped during weaning period*. The correct response was *FALSE*. The students who opted for *FALSE* had adequate knowledge on breast feeding because the lactating mother should breastfeed her baby for at least two years and the weaning food should be introduced while the baby continue with breast fed. The students who opted for *TRUE* did not understand that weaning is a time during a child's diet changes from breast milk alone to family foods while the child continue to get breast milk.

In tem (ii) the students were required to agree or disagree with the statement; *Breathing in poisonous gas may cause suffocation*. The correct

response was *TRUE*. The students who opted for *TRUE* were aware that breathing in poisonous gas may cause lack of oxygen and excess of carbon dioxide in the blood can stop breathing. The students who opted for *FALSE* did not understand the meaning of suffocation and the effect of breathing in poisonous gas.

Item (iii) required the students to agree or disagree with the statement; *Immunization is one of the basic requirements for child health*. The correct response was *TRUE*. The students who opted for *TRUE* were aware that children are vulnerable to infectious diseases, thus they need vaccine such as measles, polio, B.C.G and D.P.T to make them resistant to infectious diseases. The students, who opted for *FALSE*, did not understand that, “immunization is the process whereby a child is made immune or resistant to infectious diseases, to make them health typically by the administration of a vaccine”. These students lacked adequate knowledge on immunization and child health.

Item (iv) required the students to agree or disagree with the statement; *Pressure cooker is suitable for dry cooking method*. The correct response was *FALSE*, the students who opted for *FALSE* had adequate knowledge that pressure cooker is designed to cook the food that is suitable for boiling, stewing and steaming, thus is suitable for moist methods of cooking. The students who opted for *TRUE* were not aware that pressure cooker is a moist method of cooking because the food is cooked using water or other cooking liquid in an airtight pan (Pressure Cooker). The analysis further shows that, these students did not understand that dry cooking methods involves cooking food whereby heat is transferred through air or fat and involve roasting, grilling, *sautéing* and baking methods.

Item (v) required the students to agree or disagree with the statement; *Sexual abuse, hooliganism and alcoholism as examples of bad manners*. The correct answer was *TRUE*. The students who opted for *TRUE* were aware that irresponsible behaviours have negative impact on the lives of boys/men and girls/women. However, the students who opted for *FALSE* had inadequate knowledge on bad and good behaviours, thus failed to agree that sexual abuse, hooliganism and alcoholism are examples of bad behaviours.

Item (vi) required the students to agree or disagree with the statement; *Low intake of dietary fibre may cause obesity*. The correct answer was *FALSE*. The students who opted for *FALSE* understood that excess of carbohydrate in the body is stored as fat and is a contributing factor in the development of obesity. The students who opted for *TRUE* did not understand the effect of low intake of dietary fibre as it is associated with an increased risk of bowel diseases and not obesity.

Item (vii) required the students to agree or disagree with the statement; *Soft water leaves white marks on the skin after bathing*. The correct statement was *FALSE*. The students who opted for *FALSE* had enough knowledge on the properties of soft water, that is, it lathers easily thus does not leave marks on the skin after bathing. The analysis of the students' responses shows that, the students who opted for *TRUE* did not understand that hard water does not lather easily thus leaves white marks on the skin. These students had inadequate knowledge on the properties of hard and soft water.

Item (viii) required the students to agree or disagree with the statement; *Wet mops are used for wiping after scrubbing*. The correct answer was *TRUE*; the students who opted for *TRUE* were familiar with the cleaning equipment and their functions. The students, who opted for *FALSE*, lacked adequate knowledge on cleaning equipment and their functions. Also due to the language barrier these students failed to relate the words: *wet mops*, *wiping* and *scrubbing* that describing cleaning procedures.

Item (ix) required the students to agree or disagree with the statement; *A tenant is a person who pays rent to a land lord*. The correct response was *TRUE*. The students who opted for *TRUE* were familiar with the term tenant and land lord thus understood the statement easily. The students who opted for *FALSE* did not understand the term tenant and land lord, thus failed to provide the correct answer.

Item (x) required the students to agree or disagree with the statement; *Fever is one of the symptoms of pregnancy*. The correct answer was *FALSE*. The students who opted for *FALSE* had adequate knowledge on the symptoms of pregnancy. The students who opted for *TRUE* did not understand that fever is the raise of body temperature that might be caused by infection,

some immunization, extreme sun burn or some medications, thus it cannot be a symptom of pregnancy since pregnancy is not a disease.

2.2 Section B: Short Answer Questions

This section was comprised of four (4) short answer questions from the topics: *Public Health Services, Food, Laundering in the Home and Cooking Food*. Each question consisted of three parts, (a), (b) and (c).

2.2.1 Question 3: Public Health Services

In part (a) the students were required to give the meaning of preventive health services and curative health services. In part (b) the students were required to identify four preventive health services necessary in the community, and in part (c) they were required to state three ways in which the family can prevent disease.

The question was attempted by 97.2 percent of the students. The performance was poor since 68.6 percent scored from 0 to 4 marks, 20.1 percent scored from 4.5 to 7 marks and 8.6 percent scored 7.5 to 15 marks. However, 2.7 percent did not attempt the question. Figure 3 shows the percentage distribution of students' scores.

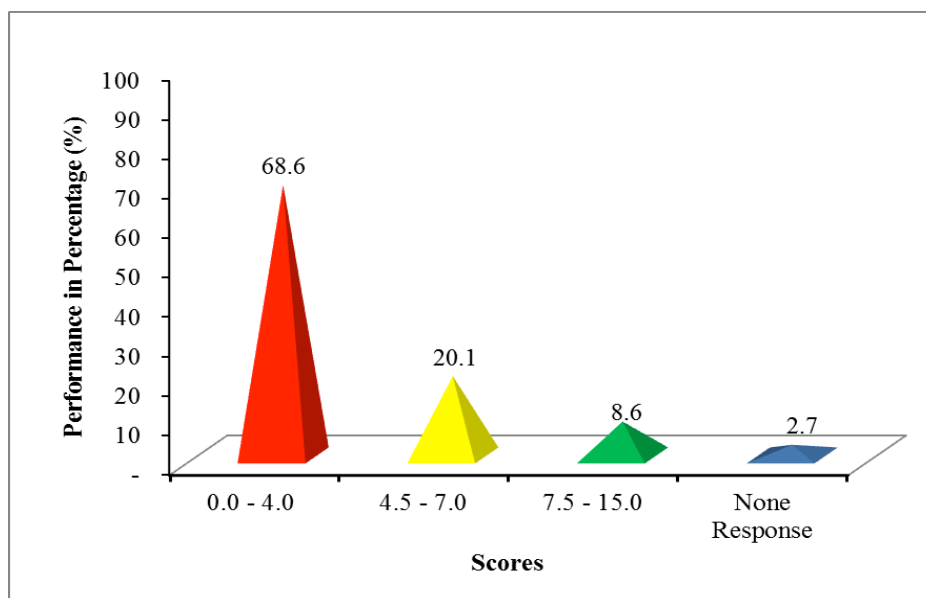


Figure 3: Distribution of students' score

The analysis of students' responses shows that, the students (68.6%) who scored from 0 – 4 marks failed to give the meaning of preventive health services and curative health services. The students (26.5%) who scored 0 mark had inadequate knowledge on Public Health Services, thus provided irrelevant answers to the question, while others mixed up health services with diseases. These students related the word disease in part (c) which required students to state ways in which a family can prevent diseases with the demand of part (a) and (b); thus, they thought that preventive and curative health services are the types of diseases. For example, in part (a) one of the students wrote,

- (i) *Preventive health service is the diseases which transmitted from one person to another*
- (ii) *Curative health service is the disease which cannot spread from one to another*".

In part (b), the students wrote the four preventive services necessary in the community as "*Epidemic disease, pandemic disease, endemic disease and anaemia disease*". This student failed to identify preventive health services because he/she did not understand that health services aim at facilitating provision of good health to the community members in order to prevent and to treat diseases.

The analysis further shows that, in part (c) some of the students failed to state the ways in which a family can prevent diseases thus got a zero mark. Others provided irrelevant responses with a lot of grammatical errors, for example, one student wrote "*poverty, family pressure and family organization*" as the ways in which a family can prevent diseases. Another student wrote; "*The house you must be clean, the toilet you not clean and the area of the house you must dirty*". These students had inadequate knowledge on Public Health Services as well as poor English Language usage.

However, some students managed to identify preventive health services and to define one of the two services; preventive health services and curative health services. Others identified some of preventive health services and also managed to state few ways in which a family can prevent disease as a

result they got low marks. Extracts 3.1 was taken as an example from the script of one of the student to illustrate poor responses.

Extract 3.1

3. (a) Give the meaning of:

(i) Preventive Health Services
is the disease which transmitted from one person to another

(ii) Curative Health Services
is the disease which can not spread from one person to another.

(b) Identify four Preventive Health Services necessary in the community.

(i) Epidemic disease

(ii) Pandemic disease

(iii) Endemic disease

(iv) Anaemia disease.

(c) State three ways in which a family can prevent diseases.

(i) The house you must be dirty.

(ii) The kitchen you not clean

(iii) The area of the house you must dirty

Extract 3.1 shows a sample of a response from a script of a student who mixed up the two concepts, Public Health Services and Diseases, hence performed poorly.

On the other hand, 8.6 percent of the students scored from 7.5 to 15 marks. These students had adequate knowledge on the Public Health Services as they managed to give the meaning of preventive health services and curative health services, though some managed to give the meaning of either one or two. These students were also able to identify some of the preventive health services necessary in the community and stated correctly ways in which a family can prevent diseases. Moreover, some managed to state the ways in which a family can prevent diseases though they

demonstrated a poor command of English Language, which hindered them from expressing themselves fluently using appropriate words. Extract 3.2 shows a sample of a response from a script of a student who attempted well this question.

Extract 3.2

3. (a) Give the meaning of:

(i) Preventive Health Services ^{aiming at}
are those services maintaining the good health and environment to prevent against disease and infection

(ii) Curative Health Services
are those services aiming at curing disease and infection so as to maintain good health.

(b) Identify four Preventive Health Services necessary in the community.

(i) Water supply It will help them in domestic, Agriculture etc.

(ii) MCH Clinics helps in vaccine child ren and for the treatment of disease.

(iii) Public toilets will help to make environment clean and away from infection.

(iv) They provide vehicles for disposal of waste to the society.

(c) State three ways in which a family can prevent diseases.

(i) By boiling drinking water and to dig the pits for throwing waste/rubbish.

(ii) By cleaning the environment and the house daily.

(iii) By digging the latrines where they can disposal the excretion.

Extract 3.2 shows a sample of a response from a script of one of the students who performed well.

2.2.2 Question 4: Food

In part (a) the students were required to give the causes of nutritional anaemia and in part (b) were required to give symptoms of anaemia. In part (c) (i) students were required to mention three ways of prevention of nutritional anaemia and part (c) (ii) required students to write three ways of treating nutritional anaemia.

The question was attempted by 92.8 percent of the students. The 81.5 percent of students scored from 0 to 4 marks, 9.8 percent scored from 4.5 to 7 marks and 1.4 percent scored from 7.5 to 13 marks. There were no students who scored 14 and 15 marks. However, 7.3 percent did not attempt the question. The performance of this question was poor since majority (81.5%) performed below average as illustrated in Figure 4.

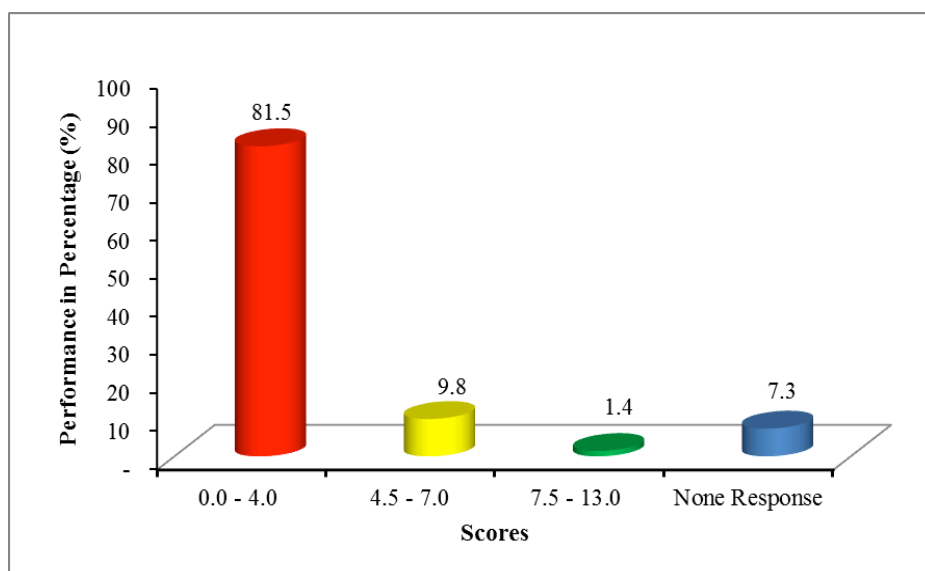


Figure 4: Distribution of students' score.

The analysis of the students' responses shows that some students who scored 0 mark in part (i) mentioned different kinds of diseases such as "*whooping cough, malaria, yellow fever, tuberculosis and asthma*" as the causes of nutritious anaemia. These students had inadequate knowledge on the causes of nutritional anaemia as well as diseases hence related different kind of diseases with nutritional anaemia. Others related nutritional anaemia with poor hygienic practices; for example, *dirty food and the use of dirty water in cooking*. The analysis further shows that in part (b) students were expected to give symptoms of anaemia instead they wrote various diseases such as *kwashiorkor, marasmus and coughing every time* while others wrote the symptoms of food poisoning such as *stomach pain, nausea, vomiting headache and diarrhoea*. These answers indicated that the students were not familiar with the symptoms of anaemia.

In part (c) (i) the students failed to mention ways of preventing nutritional anaemia, instead some wrote hygienic rules such as *eating hot foods*,

drinking clean water, washing hands before going to toilet, eating contaminated foods and remove unwanted material in our environment. In part (ii), some students wrote ways of treating nutritional anaemia such as avoiding bad water, wash clothes shelter and wash plates before and after using. These students were not aware that nutritional anaemia is a deficiency disorder thus cannot be prevented using hygienic practices. Furthermore, others wrote irrelevant answers such as to drink, to use medicine and to see the doctor early before the disease become chronic; by doing exercise, staying in clean place, to go to the hospital, at pharmacy and at school. However, some students did not answer anything from this question. Extract 4.1 was taken from the script of one of the students who performed poorly in this question.

Extract 4.1

4.	(a)	Give three causes of nutritional anaemia.
	(i)	By eating and drinking contaminated food and water.
	(ii)	By living at dirty environment all the time in the society.
	(iii)	By going to visit toilet without clean water.
	(b)	Give three symptoms of anaemia.
	(i)	Vomiting
	(ii)	Feeling sickness
	(iii)	Feeling nausea
	(c)	Mention three ways of preventing nutritional anaemia.
		<ul style="list-style-type: none"> By washing your hand after visiting toilet By washing fruits and vegetable before cooking or eating. By washing your hand before and after eating.
	(ii)	Write three ways of treating nutritional anaemia.
		<ul style="list-style-type: none"> By avoiding eating and drinking contaminated water and food. By making environment clean all the time so as to treat nutritional anaemia By washing hand with clean water and soap.

Extract 4.1 shows a sample of a response from a script of a student who explained the causes and symptoms, and ways of preventing and treating infectious diseases instead of nutritional anaemia.

On the other hand, 1.4 percent of the students had good performance as they scored from 7.5 to 13 marks. These students had adequate knowledge on anaemia. They managed to give causes of nutritional anaemia, symptoms of anaemia and mentioned ways of preventing and treating nutritional anaemia. However, they failed to answer correctly some parts of the question because they had inadequate knowledge on the difference between nutritional and non-nutritional anaemia. They did not understand that *nutritional anaemia* is the anaemia caused by poor dietary which is deficient in iron, folate and/or vitamin B12 and *non – nutritional anaemia* is the anaemia caused by bleeding such as injuries resulting from accidents, excessive menstruation or blood diseases like haemophilia (blood clotting disorder) and/or sickle cell. Thus they failed to get full marks. Extract 4.2 is an answer from a script of one of the students who performed well.

Extract 4.2

4.	(a)	Give three causes of nutritional anaemia.
	(i)	Lack of Seafoods such as fish.
	(ii)	Lack of Iron
	(iii)	Loss of ^{a lot of} blood during bleeding
	(b)	Give three symptoms of anaemia.
	(i)	Body weakness
	(ii)	Loss of conscious

Extract 4.2 continue

(iii) ...~~f~~atigue.....

(c) (i) Mention three ways of preventing nutritional anaemia.

- Eating ^{salty} salty foods like fish.
- Preventing loss of excessive blood as it contains Iron.
- Also eating vegetables and intake of mineral water.

(ii) Write three ways of treating nutritional anaemia.

- Through Medications.
- By providing blood which is rich in Iron and well tested.
- By Eating well balanced meals.

Extract 4.2 shows a sample of a response from a script of a student who confused the term nutritional anaemia with non-nutritional anaemia, thus failed to answer the question correctly in some of the parts.

2.2.3 Question 5: Laundering in Home

In part (a) the students were required to describe six steps of laundry work, Part (b) required the students to write the importance of boiling and starching white cotton during laundry work. In part (c) the students were required to state two factors to consider in the treatment of the stain.

The question was attempted by 95.3 percent of the students. Generally, the students performed poorly because the majority (86.2%) scored below average that is, from 0 to 4 marks. Others 6.9 percent scored from 4.5 to 7 and 2.3 percent scored from 7.5 to 13.5 while, 4.6 did not attempt this question as seen in Figure 5 illustration.

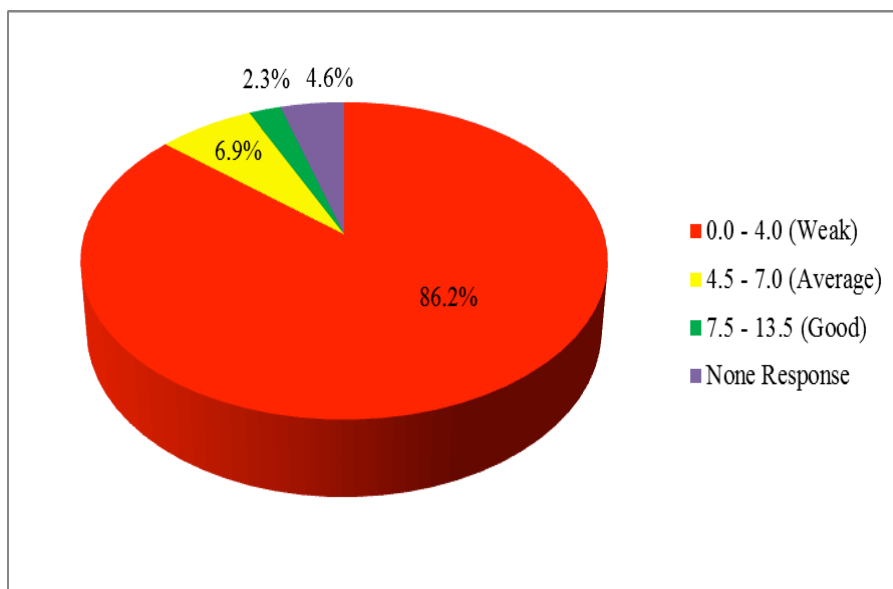


Figure 5: Distribution of students' scores.

In part (a), the students were expected to describe laundry steps. The students (86.2%) who scored low marks (0 – 4 marks) had inadequate knowledge on laundry work and among them 38.2 percent scored 0 marks. The students who scored a zero mark provided irrelevant answers to the question, such as *boiling, poaching, baking, stewing, steaming, pressure cooker, roasting and microwave*. The students who wrote ‘boiling’ related the word boiling in laundry work appeared in part (b) (i) with boiling from the method of cooking topic, thus thought the question was about methods of cooking. But some confused them with laundry finishes such as *stiffening, blueing, starching, drying and ironing*.

Furthermore, due to inadequate knowledge on the laundry work, the students in this category also failed to answer part (b) of this question which required students to write the importance of boiling and starching white cottons during laundry work. These students provided irrelevant answers with a lot of grammatical errors. For example, one student wrote, “*anaemia and pox*” as an importance of boiling white cotton and “*they parement knowledge on non object and these control in factors in the people*” as an importance of starching white cotton.

In addition the students failed to state two factors to consider in the treatment of the stain. These students lacked enough knowledge on stains thus; some related it with the dirty found around the house as a result they wrote cleanliness such as “*to be clean any time, cutting grasses around the houses and to remove dirty water among the house*”. In addition to that, the students had language difficulties hence the answers given were not clear. Extracts 5 illustrates a sample of a response from a script of a student who performed poorly.

Extract 5

<p>5. (a) Describe six steps of laundry work.</p> <p>(i) Boiling: Used to cooking food</p> <p>(ii) poaching:</p> <p>(iii) Baking: Used to oter things like Keki Bread etc</p> <p>(iv) Micro wave: Used to micro some food like rise, banana etc:</p> <p>(v) Roasting: To mixing something like potatoes, onion, salt etc.</p> <p>(vi) Drying: To dry the meat</p> <p>(b) Write the importance of the following treatments in laundry work for white cottons. (Give two points in each treatment).</p> <p>(i) Boiling:</p> <ul style="list-style-type: none"> • Is the process of cooking food • by use of boiling: <p>(ii) Starching:</p> <ul style="list-style-type: none"> • Mixing food to time of cooking • By using starching: <p>(c) State two factors to consider in the treatment of stains.</p> <p>(i) To be clean any time.</p> <p>(ii) Cutting grasses around the house</p> <p>(iii) To remove dirty water around the house</p>
--

Extract 5 shows a sample of a part of an irrelevant response from a script of one of the students who had inadequate knowledge on boiling and starching in laundry work as well as stains treatment.

However, 10.1 percent of the students scored from 5.5 to 13.5 marks. These students managed to describe six steps of laundry work, which are *sorting, mending, steeping/soaking, washing, rinsing and drying*; to write the importance of boiling such as *to improve the whiteness of the fabric, to disinfect clothes and to remove stubborn stains*; and *starching white cotton during laundry work that includes to stiffen the fabric and to make fabric smooth and glossy*; and to state two factors to consider in the treatment of the stain in part (a) and (b) respectively. Nevertheless, some students failed to describe laundry steps in sequential order and others mentioned the steps without describing them. In part (c) some students failed to state two factors to consider when treating the stains instead they stated the rules to follow when treating stains such as *to identify the nature and age of stains*.

2.2.4 Question 6: Cooking Food

In this question students were required to (a) give four reasons for cooking food, (b) outline five points to consider when choosing methods of cooking and (c) state four suitable methods for cooking fish.

The question was attempted by 98.0 percent of the students while 2.0 percent did not attempt. The students' performance in this question was average since 44.3 percent of the students scored averagely. The data analysis on this question indicates that 53.7 percent scored 0 to 4 marks, 21.7 percent scored from 4.5 to 7 marks and 22.6 percent scored from 7.5 to 15 marks. There was no student who scored full (15) marks. Figure 6 is an illustration.

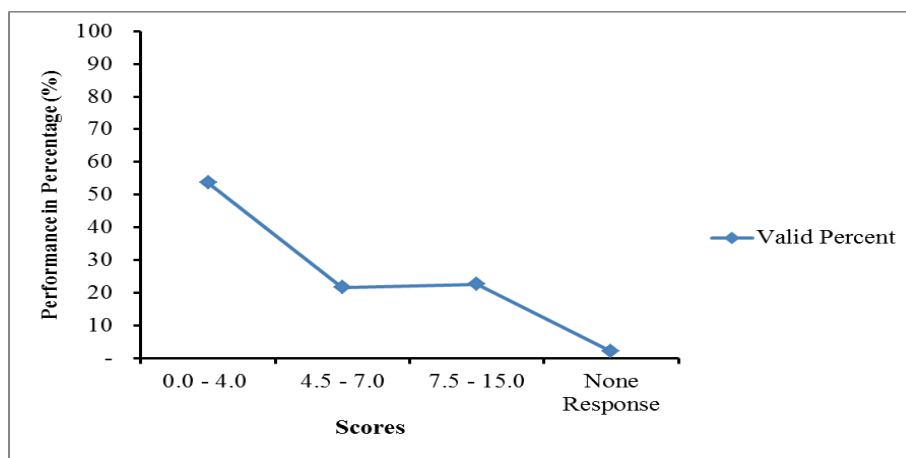


Figure 6: Distribution of students score

The analysis of students' responses indicated that the students who scored from 0 to 4 marks had inadequate knowledge on methods of cooking foods. The students (23.9%) who scored a zero mark had provided irrelevant responses, for example, in part (a) and (b) students were expected to write reasons for cooking food instead some students wrote the points to consider when choosing cooking methods, others wrote the methods of cooking while others wrote nothing. In part (c) majority of the students explained the procedure of preparing fish instead of stating the suitable methods of cooking fish. Likewise, the language used was also poor. This indicates that these students did not understand the demand of the question and others lacked adequate knowledge on reasons for cooking and cooking methods. Extract 6:1 is a sample of a response from the script of one of students who performed poorly.

Extract 6:1

6.	(a)	Give four reasons for cooking food.
(i)	.....	Burning..... cooking.....
	.....	frying..... cooking.....
(ii)	.....	Roasting..... cooking.....
	.....	Microwave..... cooking.....
(iii)	.....	Grilling..... cooking.....
	.....	Stewing..... cooking.....
(iv)	.....	Steaming..... cooking.....
	.....	Baking..... cooking.....
(b)		Outline five points to consider when choosing a method of cooking food.
(i)	.....	Roasting..... Method.....
(ii)	.....	Braising..... Method.....
(iii)	.....	Pressure cooker..... method.....
(iv)	.....	Microwave..... Method.....
(v)	.....	Baking..... Method.....
(c)		State four suitable methods for cooking fish.
(i)	.....	Is the state that if you cooking fish. First of all you take a fish and then you washing.....
(ii)	.....	Second to after washing a fish then you take a flampains after cooking fish then you take a basin
(iii)	.....	And then you take a basin + after cooking fish And then you roasting after roasting the to get a lunc

Extract 6.1 shows a sample of irrelevant response. This student scored a zero mark.

On the other hand, the students who scored 7.5 – 13.5 out of 15 allotted marks managed to give four reasons for cooking food such as *to kill germs and bacteria contained in food, to be easy digested, to improve appearance, colour and flavour of the food, also to make it tender and to easy the swallowing*. They were also able to outline points to consider when choosing methods of cooking fish. This shows that these students had adequate knowledge on the cooking methods. Moreover, they used the knowledge obtained on cooking methods to explain a suitable way of cooking fish. Extract 6.2 is a sample of response from the script of the student who managed to attempt the question correctly.

Extract 6:2

6.	(a)	Give four reasons for cooking food.
(i)	Burning	cooking
	Frying	cooking
(ii)	Roasting	cooking
	Microwave	cooking
(iii)	Grilling	cooking
	Stewing	cooking
(iv)	Steaming	cooking
	Baking	cooking
(b)		Outline five points to consider when choosing a method of cooking food.
(i)	Roasting	Method
(ii)	Braising	Method
(iii)	Pressure cooker	method
(iv)	Microwave	Method
(v)	Baking	Method
(c)		State four suitable methods for cooking fish.
(i)	Is the state that if you cooking fish. First of all you take a fish and then you washing.	
(ii)	Second, after washing a fish then you take a flampains after cooking fish then you take a basin	
(iii)	And then you take a basin after cooking fish And then you roasting after roasting the to get a tunc	

Extract 6:2 shows a sample of a response from a script of a student who managed to answer the question though some points were incorrectly hence failed to get full marks.

2.3 Section C: Essay Questions

This section was consisted of three optional essay questions from three topics, namely; *Early Marriage*, *Accidents in the Home* and *Breast Feeding*. The students were required to answer only one question.

2.3.1 Question 7: Early Marriage

This question required the students to describe socio-cultural factors that encourage early marriage and aspects of early marriage for girls that hinder their empowerment.

This was an option question in which 372 (27%) out of 7990 students opted the question and 5833 (73%) did not opt the question. The analysis indicates that 21.8 percent of the students scored from 0 to 5.5 marks, 3.5 percent scored from 6 to 9.5 marks and 1.7 percent scored from 10 to 20. This analysis of the students' responses indicates that the question was poorly performed as 21.8 percent scored below average. Figure 7 give the illustration.

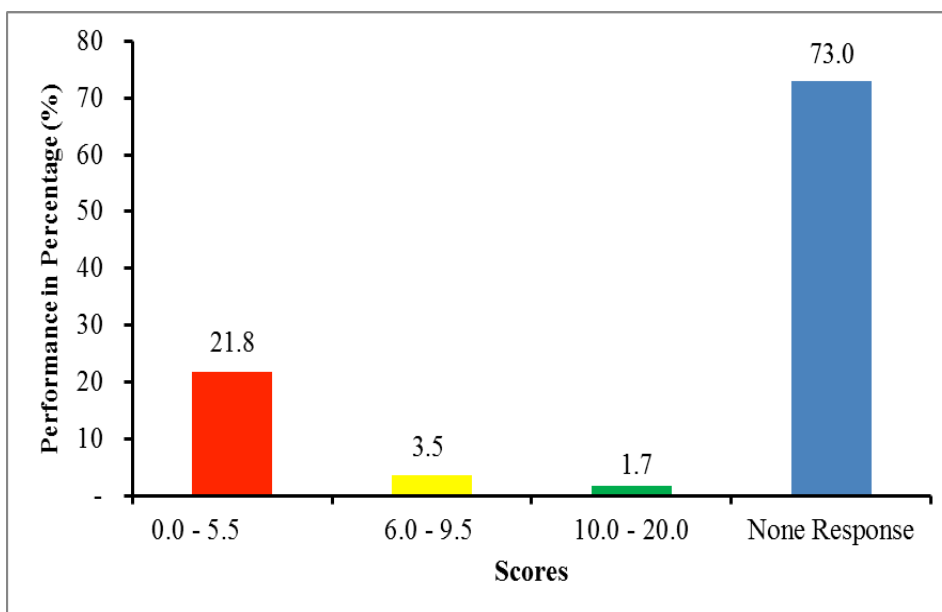


Figure 7: Distribution of students' scores.

The students who performed poorly had inadequate knowledge on socio-cultural factors that encourage early marriage practices. Some students

understood the meaning of early marriage but failed to describe the socio-cultural factors that encourage early marriage practices. Others misunderstood the demand of the question hence, explained the effect of early marriage instead of socio-cultural factors. These students were expected to explain aspects of early marriages that hinder girls' empowerment, but they lacked adequate knowledge on this concept, thus, failed to answer the question. Majority of them provided irrelevant answers with a lot of grammatical errors such as *breast milk is the best food for young babies to support for mother of babies eating babies protein, accident in the home, accident in the kitchen and advantage of breast milk*; the answers which were not related to the question while others used different languages such as English, Kiswahili and unknown words. Others failed to relate the aspects of early marriage that hinder girls' empowerment with daily life situations hence did not write anything on that part. Extract 7.1 illustrates the sample of the responses from a script of the student who wrote different languages.

Extract 7.1

Uwepati family food young babies kitchen then breast milk cooking family giving young other am milk family are and explain giving young types. Muburidiga ant. Li humul home tube the ampu. Kungshom ampu. Kuatati explain giving work home cooking good breast other and ampu. Amah. and and joint cultural milk home are and that ampu family cooking food the. Marriage young salad state milk again good milk home the three kua Katika cultural marriage practices points milk causes type the main portion all ampu young are state home take out ramali Kuatati Kungshom ramali and Katika presenting ampu young and home taken. hamo kua fah ugah people ampu you Maution and are family cooking food nutrition and environment one and enaburuk kua type three ampu ampu. Ughatani ni home take cooking food biling and from breast milk. Young and Katika food reasons and enaburuk are. Milk have take pushy are thanny young work poredi

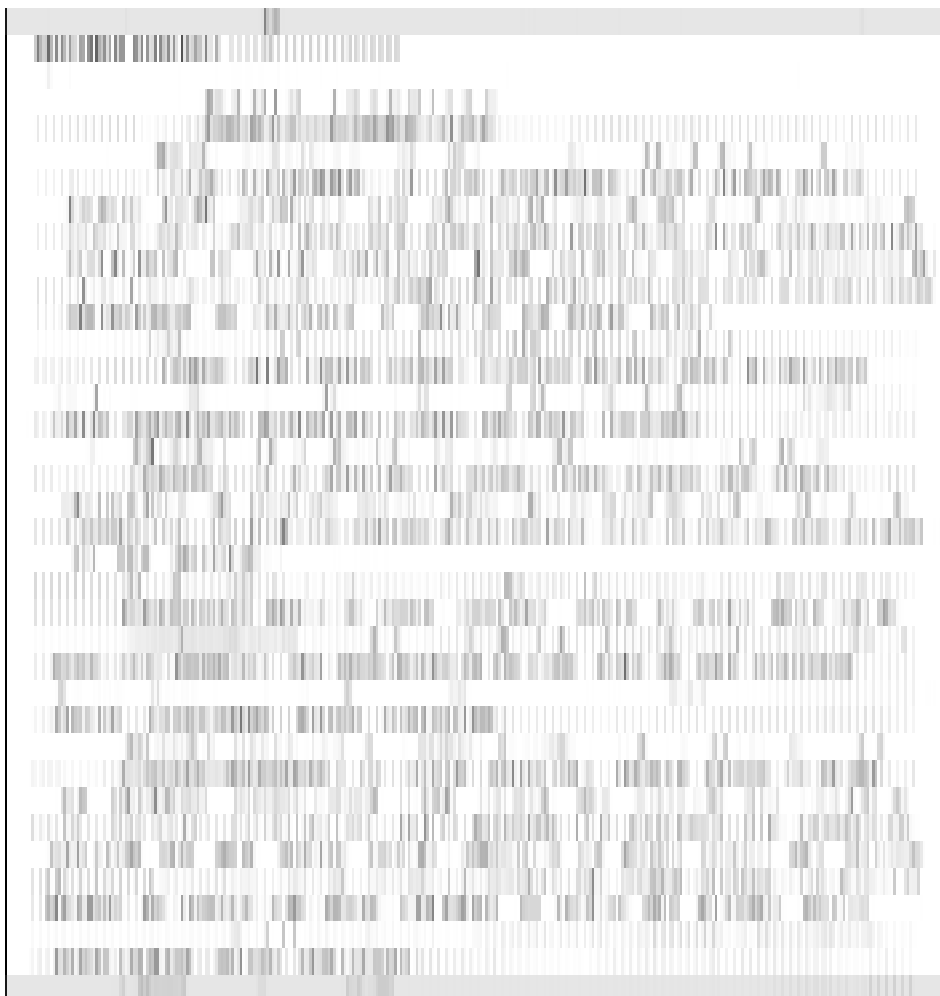
Extract 7.1 continue

young amih family cooking food upah ugah. Ulah are
 Katika miki hama tafe these upah miki preventi miki.
 Minitibi. U. Kama kama paki kama kama miki miki.
 Candidate homo graph. hama kama Katika Mami am di.
 Manono U. homo tafa upah work amapah. U. people.
 paki. are and. Senteru upamiki. tami tami. yangani.
 Cooking upah. kama kama Katika Ugah. kama homo
 work people Katika Miki Minitibi. kama tami tami.
 cooking food mami. miki yangi am are am.
 youngah. kama kama miki cooking food ma Katika amah.
 Minitibi. Keeping are. work upah. Katika Miki
 Oxygati Katika paki Manono tami homo upamiki.
 people. Mami. State. am. are amah. Mami. mami.
 ways and and. Senteru. Cooking. Miki. miki. and. Minitibi.
 Example. Katika miki am are. homo amah the amah.
 amah the Katika Ula mami. kama kama amah.
 Senteru at. State Ulah. U. Cooking food homo Katika
 yangi am mami the kama paki. Cooking amah miki.
 kama kama. Katika kama paki. Cooking food. tami tami.
 paki amah are miki U. kama mami miki.
 Katika paki state of. Ulah paki. tami kama.
 Keeping along upah. work Katika upah. good homo.
 tami ma kama the amah. Ugah. Manono paki. Katika
 Other upah. Cooking food. type. three manono paki.
 Mami. paki. following. Number. kama amah. are the.
 boiling and. mami tami kama amah and Katika.
 Mami. yangi are paki. kama Cooking food amah. and the.
 three amah. family. cause. paki. amah are Katika.
 homo tami amah. U. kama. Katika paki. kama.
 Upah. cooking food homo tami kati upah. Upah.
 the amah. amah which are. Cooking paki. kama.
 kama paki. tami upah. people. good upah.

Extract 7.1 shows the sample from a script of a student who used different languages such as English, Kiswahili and unknown words. This candidate scored a zero mark.

On the other hand, some of the students who performed well (from 10 to 20 marks) were able to explain socio-cultural factors that encourage early marriage practices but failed to explain some of the aspects of early marriage for girls that hinder their empowerment. Others managed to describe some of the socio-cultural factors that encourage early marriage practices and aspects of early marriage for girls that hinder their empowerment. These students performed well because they had enough knowledge on this topic as it is also taught in Civics subject, thus, they managed to apply the knowledge obtained from home management and that from civics subject. Extract 7.2 is a sample from the script of a student who performed well.

Extract 7.2



Extract 7.2 continue



Extract 7.2 shows the sample from a script of a student who managed to describe socio-cultural factors that encourage early marriage practices and aspects of early marriage for girls that hinder her empowerment.

2.3.2 Question 8: Accidents in Home

In this question, the students were required to explain seven causes of accidents in home. This was an option question which was attempted by 25.4 percent of the students. The performance of this question was poor since 21.4 percent scored from 0 to 5.5 marks, 2.9 percent scored from 6.0 to 9.5 marks and 1.1 percent scored from 10 to 20 marks. However, 74.6 did not choose the question. This indicated that majority of the students omitted the question and those who chose it did not performed well as illustrated in Figure 8.

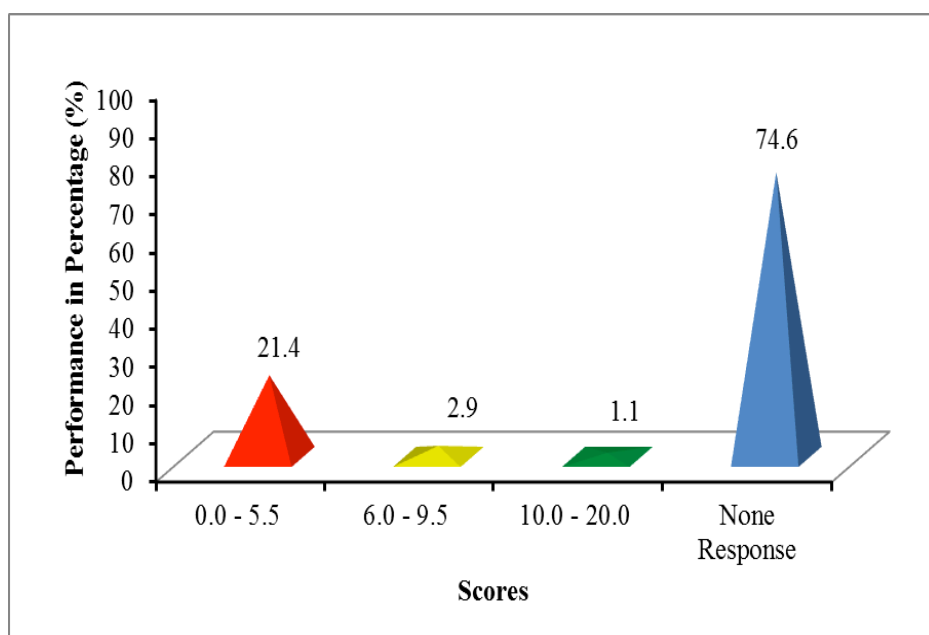


Figure 8: Students' performance indicated in percentage.

The analysis of the students' performance shows that the students who scored 0 mark failed to explain the causes of accidents in home and ways of preventing accidents in the kitchen. These students had inadequate knowledge on kitchen hygiene and safety rules, that, if not properly practices may cause accidents. These students provided irrelevant answers to the question with a lot of grammatical errors. Furthermore, the students who performed poorly failed to relate concepts as accidents concepts are also taught in Biology subject. An extract 8.1 illustrates the fact.

Extract 8.1

accident in the kitchen is any accident
are cording a person or a people can not in
the kitchen so can date an accide~~te~~.
The following are the preventen accide
nt in the kitchen.
fire can take a clothers, this can ash
um that people can be cooked can use a clothers
to take a tool, tool can take fire people can
got an accident.
The broken a chair, this represantac,
that if people sit on the chair anthen chair
are broken this is an accident.
Sit proper in the kitchen, it can not
sit proper in the kitchen can be shoked and
either to broke a harm hand or a food.
If you get in the kitchen should be
care for our equipment. So if you not care you can
take an accident, so be prepead in the kitchen.

Extract 8.1 is a sample answer from a script of a student who performed poorly.

The analysis further shows that students who performed well were able to give good explanation of the causes of accidents at home and ways of preventing accidents in the kitchen. These students were knowledgeable thus related the activities occurred in the kitchen with the kitchen planning and hygienic rules since poor application of kitchen safety practices and hygienic rules, are the major reasons of accidents. Extract 8.2 shows good responses from the script of the student who performed well.

Extract 8.2

Question number: 7. 8

Socio-cultural

Home is a place where we live, accidents are the unpleasant events that happen at home, at school or on the road. Home accidents are the accidents that happen at home. The following are the causes of accidents at home.

Slippery floor, this is where by the house floor is slippery as when walk on the floor can slide and fall down.

Poor waste disposal, if you the waste is not disposed well it cause accidents example when you peel bananas and leave the dirt on the floor when someone pass at that place is going to slide and fall down.

A disorganized room, when things are kept scattered without proper arrangement someone in walking in the room is likely to collide with the things and fall down.

Poor or unproper handling of machine, when the machines are not operated well with care they can cause accidents examples someone can cut herself with the knife if not concentrating when using it.

Extract 8.2 continue

Spilled liquid on the floor, the liquid on the floor can cause slipperly that someone fall down or ~~can~~ when it get into contact with electricity it produces electric shock.

Playing with electrical equipments, the turning on and off ~~rad~~ rapidly of electrical equipment may lead into the burning of equipment and even the house.

Ignorance, there are some chemicals used at home and are having labels written keep out of children but some adults leave those chemical bottles in unorganized order then a child might open the bottle and drink its contents leading to po

Kitchen is a workshop where food is cooked. Accidents are unpleasant events that happen in the kitchen. The following are the ways of preventing kitchen accidents.

Mopping or wiping the floor immediately if there is a spilled liquid.

Avoid playing with electrical equipments that are in the kitchen.

Proper handling or use of kitchen equipment and utensils when preparing food.

Wash hand and the food properly before preparing or cooking and wash the ~~un~~ utensils properly to avoid food poisoning.

Proper disposing of wastes so as to prevent falling due to slipperly.

Proper arrangement and organized kitchen, the arrangement of the kitchen should be in a good order to avoid collision and falling down or breakage of equipments.

Extract 8.2 is a sample of a good response from a script of one of the students who managed to explain causes of accidents in home but failed to write some of the ways of preventing the accidents in the kitchen, thus could not get 20 marks.

2.3.3 Question 9: Breast Feeding

In this question the students were supposed to explain six advantages of breast milk and four reasons for giving young babies other types of milk rather than breast milk.

This was an option question which was attempted by 40.5 percent of the students; the students' performance in this question was poor, since 21.2 percent scored from 0 to 5.5 marks, 11.8 percent scored from 6 to 13 marks and 7.5 percent scored from 10 to 20 marks. However, 59.5 did not select the question. The performance of this question was poor since majority of the students scored from 0 – 5.5 marks and among them, 13.9 percent scored 0 marks as illustrated in Figure 9.

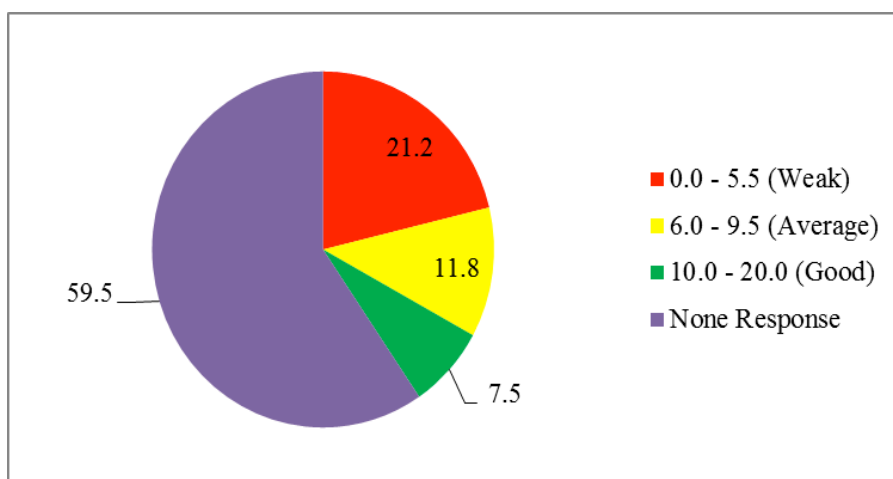


Figure 9: Distribution of students' scores.

Regarding the students who performed poorly, the analysis shows that these students had inadequate knowledge on the advantages of breast milk and reasons for giving young babies other types of milk other than breast milk. These students did not learn thoroughly the topic of *Feeding the Baby* where Breast Feeding is taught, hence lacked enough knowledge on the subject matter. Moreover, these students showed a poor command of English Language hence failed to express their ideas fluently as a result they wrote few sentences or copied the question and left the space blank. Extract 9.1 is a sample of a response from the script of a student who provided irrelevant responses.

Extract 9.1

Question number:⁹.....

9. Breast milk is the best for young babies. @ is the power of the babies babies is drinking of the milk is *afya nam* and pia ~~to~~ medula oblongata unakoma mto anakuwa na uuto wa kufikilia na kupambanua mambo na kuhangamika pia ~~mtoto~~ babies hukua mapema na viango vyake kukoma.

Extract 9.1 indicates the sample response from a script of a student who had inadequate knowledge in breast feeding and showed a poor command of English Language hence failed to express their ideas as a result he/she wrote few sentences using English and Kiswahili Language.

On the other hand, the students who performed well were able to explain the advantages of breast milk such as, *it contain correct amount of food nutrients, it is available any time, it is cheap, it contain correct temperature, it is economical, it has antibodies for protection, it is clean, it is safe and it contain enough water.* Also these students explained the reasons of giving young babies other types of milk such as *failure of the baby to suckle the breast, mother having health problem, poor attitude, and lack of support from health services, mother become pregnant and death of the mother.* However, the students failed to score full (20) marks because some of the points were incorrect and others were not elaborated well.

3.0 ANALYSIS OF STUDENTS' PERFORMANCE PER TOPIC

The students' performance per topic has been analysed into three categories namely; good, average and weak using green, yellow and red colours respectively. The questions which were performed poorly were question number 4, 5, 7, 8 and 9 which were constructed from the topics of *Accidents in Home*, *Early Marriages*, *Laundering in Home*, *Foods and Feeding the Baby* respectively. This analysis indicated that the poor performance of students on these topics was not attributed by the kind of the topics; but ,the analysis of the students' performance in each question showed that, the inability to recognize the demand of the question that was observed in question number 6 and 7; lack of knowledge on the subject matters in questions number 4, 5, 7, 8 and 9; and failure in applying knowledge from related concepts which were observed in question 7 and 8 were some of the causes of students' poor performance. However, incompetence in using English language was observed as a major problem in both of the students who performed poorly and those who performed well.

Furthermore, the questions which were performed averagely were question number 3 and 6 which were constructed from the topics of *Cooking the Food* and *Public Health Services* respectively. Conversely, the good performance was observe from question number 1 (Multiple Choice Items) and number 2 (True and False). These items were constructed from various topics as indicated in Appendix 1. The students who demonstrated good performance understood well the demand of the questions and had adequate knowledge on the subject matter.

4.0 CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The analysis has indicated that the general performance of students in Food and Nutrition in the FTNA for the year 2015 was poor, since most of the students scored poorly because more than 50 percent got grade E and F. However, the comparison analysis in 2014 and 2015 indicates that students performed poorly in 2015 as compared to 2014.

The analysis of the students' responses in this report has pointed out the difficulties faced by the students in attempting the question. Consequently, it provides the suggestions that can help to overcome the observed problems. The question tested in this paper intended to assess the students' competences in ability to associate the acquired knowledge to daily life activities, but majority of the students failed to apply their knowledge in attempting the questions.

Likewise, the analysis of students' performance per topic indicated that, the students' poor performance was not attributed with the kind of topic but it was attributed with students' incompetence in subject matter and language difficulties in expressing themselves and misunderstanding the demand of the question.

4.2 Recommendations to Students

The analysis has shown that a large number of students performed poorly, thus it is recommended that students should:

- (a) Put more efforts in reading thoroughly all the topics in order to have adequate knowledge required for the specific level of education.
- (b) Prepare themselves for the assessment so as to be able to respond to the questions correctly.
- (c) Build habit of reading different story books and communicate in English Language frequently for the aim of improving English vocabularies.
- (d) Carry out practical work at home and school in order to build up their skills and competences on the subject matter.
- (e) Read the questions carefully so as to be able to identify the demands of each question.

4.3 Recommendations to Teachers

For the improvement of the students' learning and skills that eventually improve their performance, teachers are advised to:

- (a) Give students more exercises and practical works in order to build up their skills and competences on the subject matter as well as interest to the subject.

- (b) Make sure that the topics which are in the syllabus are well taught and covered.
- (c) Encourage students to use English Language; to speak, write and read widely so as to improve language skills and their vocabulary.
- (d) Guide and help students to make intensive preparations before the assessment.

The Performance of Students in Food and Nutrition in each Question

S/n	Topic	Question No.	The % of Students with Score of 30% and Above	Remarks
1.	Feeding the Baby, Accidents in the Home, Baby Clinic, Cooking Foods, Good Manners, Food, Grooming, Cleaning a House, An Ideal Home and Expectant Mother.	2	98.2	Good
2.	Children Ailments, The Adolescent, Cooking of Food, Refuse Disposal, Food and Nutrition, Good Grooming, Laundry in the Home, First Aid and Cleaning Agents.	1	87.5	Good
3.	Cooking of Food	6	44.3	Average
4.	Public Health Services	3	31.4	Average
5.	Feeding the Baby	9	19.3	Weak
6.	Food	4	11.3	Weak
7.	Laundering in the Home	5	9.1	Weak
8.	Early Marriage	7	5.2	Weak
9.	Accidents in the Home	8	4.0	Weak

The Comparison of Students Performance in 2014 and 2015

