

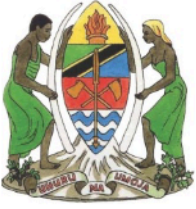


THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA



**STUDENTS' ITEM RESPONSE ANALYSIS
REPORT ON THE FORM TWO NATIONAL
ASSESSMENT (FTNA) 2023**

HOME ECONOMICS



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(FTNA) 2023**

050 HOME ECONOMICS

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FOREWORD

The National Examinations Council of Tanzania (NECTA) is pleased to issue this report on Students' Item Response Analysis (SIRA) for the 2023 Form Two National Assessments (FTNA) in Home Economics. The Form Two National Assessment (FTNA) evaluates competencies gained by students after their two years of secondary education for the purpose of giving feedback to students, teachers and school managers on the performance of the students in the subject. The scores obtained in FTNA are used as part of the continuous assessment in the Certificate of Secondary Education Examination

The report shows the analysis of students' responses and provides the reasons for students' good performance and the challenges that might have caused poor performance to some of the students. The analysis shows that some students performed poorly due to lack of knowledge and skills in assessed topics, inability to identify the requirements of the questions, and poor mastery of English language. Moreover, the analysis indicated that the performance of some of the students was good because they were able to identify the requirements of the questions, and had adequate knowledge of the subject matter.

The National Examinations Council of Tanzania expects that the feedback provided in this report will enable teachers, students, policy makers and other education stakeholders to work on the challenges which the students faced in order to improve performance in this subject on the future assessments.

Finally, the National Examinations Council of Tanzania is grateful to all the examinations officers and other stakeholders who participated in the preparation of this report.



Dr. Said A. Mohamed
EXECUTIVE SECRETARY

1.0 INTRODUCTION

This report is based on the analysis of students' performance in Home Economics subject in the Form Two National Assessment (FTNA) 2023. The analysis highlights strengths and weakness observed when the students were responding the questions in order to provide a general overview of the students' performance.

The Home Economics paper was divided into three sections: A, B and C with a total of ten (10) questions. Section A consisted of two (2) objective questions carrying 15 marks, Section B consisted of seven (7) short answer questions with 10 marks each. Section C had one (1) question carrying 15 marks.

The data indicates that 5,302 students sat for the assessment in 2023 of whom 3,170 (59.79%) passed. The analysis reveals that the general performance was average. The students' performance in grades is as follows: A - 78 (1.47%), B - 260 (4.90%), C - 1,270 (23.95%), D - 1,562 (29.46%) and F - 2,132 (40.21%).

The analysis shows that the students' performance in 2023 was average with a decrease of 5.32 per cent compared to that of 2022, whereas 65.11 per cent of students passed.

The report analyses the students' responses to each question by explaining the requirement of the question, the percentage of the students who attempted the question with their scores, and the reason for such performance. Extracts from the students' scripts, graphs and charts are inserted to illustrate the reported information. The report also provides analysis of performance per topic, a conclusion and recommendations for improving students' performance in the future assessment.

In this report, the students' performance to a particular question is regarded as good if they scored from 65 to 100 per cent, average if the students scored from 30 to 64 per cent, and poor (weak) if the score is from 0 to 29 per cent. Good, average and poor performances are indicated by using green, yellow and red colours, respectively.

2.0 ANALYSIS OF THE STUDENTS' PERFORMANCE ON EACH QUESTION

2.1 Section A: Objective Questions

This section consisted of two (02) questions. Question one (01) comprised ten (10) multiple-choice items, each item carried one (01) mark. Question two (02) comprised five (5) matching items, each item carried one (01) mark, making a total of 15 marks for the whole section.

2.1.1 Question 1: Multiple Choice Items

This question consisted of ten multiple-choice items derived from the topics of *Good Manners* and *Good Grooming, Food and Nutrition, Basic Sewing Stitches, An Ideal House, Cooking Food, The Kitchen, Sanitation in the House, Laundry* and *Maternal and Child Health*. The question required the students to choose a correct answer among the given alternatives and write its letter in the box provided.

All 5,302 (100%) students attempted question one. The general performance on the question was good since 4,911 (92.63%) students scored average or above. The analysis indicates that 1,686 (31.80%) students scored from 7 to 10 marks, 3,225 (60.83%) scored from 3 to 6 marks and 391 (7.37%) scored from 0 to 2 marks. This implies that the students had sufficient knowledge on the content covered in these items. The performance on question one is illustrated in Figure 1.

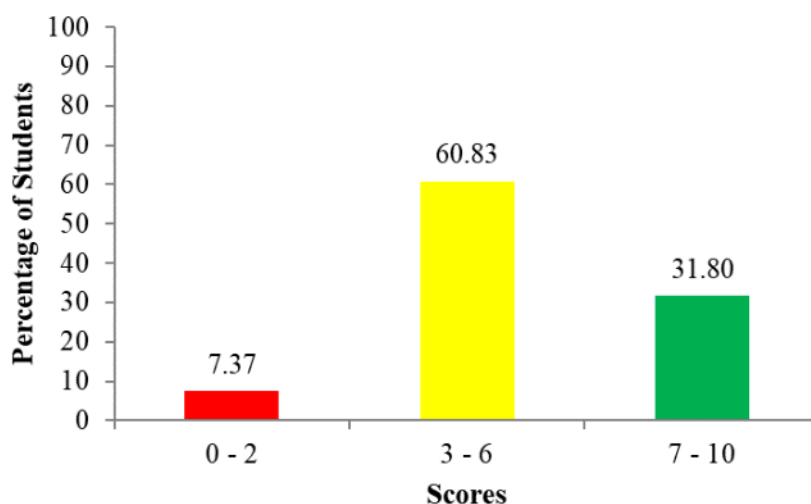


Figure 1: *The Students' Performance on Question 1*

The following is the analysis of students' response in each item (i) – (x):

- (i) *You are asked to talk to the youths on good manners. Which set of practices would you recommend them to observe?*
- A *Greeting elders, helping adults and hooliganism.*
 - B *Greeting elders, alcoholism, and thankful.*
 - C *Greeting elders, helping adults and being honest.*
 - D *Greeting elders, thankful and drug abuse.*

The correct answer was C - *Greeting elders, helping adults and being honest*. The students who opted for the correct response were aware of good manners practices. The students who opted for A - *Greeting elders, helping adults and hooliganism*, B - *Greeting elders, alcoholism and thankful* or D - *Greeting elders, thankful and drug abuse* might have failed to understand that hooliganism, alcoholism and drug abuse, respectively are not good manners practices rather, are bad manners practices.

- (ii) *Dieticians encourage people to have adequate dietary fibres in their meals. Why is this recommended?*
- A *They aid in digestion and prevent constipation.*
 - B *They build up the body and repair worn out tissue.*
 - C *They insulate the body and give body energy.*
 - D *They strengthen immunity and protect the body.*

The correct answer was A - *They aid in digestion and prevent constipation*. Students who chose the correct response were aware that dietary fibres aid in digestion and prevent constipation. Those who opted for B – *They build up the body and repair worn out tissues*, failed to understand that these were the functions of protein. For those who chose C – *They insulate the body and give the body energy*, failed to understand that one of the primary roles of fat is to provide heat and energy in the body. Moreover, for those who opted for D – *They strengthen immunity and protect the body*, failed to understand that these were the functions of vitamins in the body.

- (iii) *During sewing a tailor discovered that the loops were formed on the right side of the stitching. How would you correct the problem?*
- A *By tightening tension screw.*
 - B *By re-threading correctly.*
 - C *By loosening tension screw.*
 - D *By tightening needle screw.*

The correct answer was *C - By loosening tension screw*. The students who opted for the correct response were aware of the causes of loops on right side of stitching, which is reel thread tension too tight. Therefore, corrected by loosening tension screw. Those who chose *A - By tightening tension screw* failed to understand that it was the remedy for loops which appear on the wrong side. For those who opted for *B – re-threading correctly*, failed to understand that this is the remedy for rectifying thread breaking during sewing. Furthermore, those who opted for *D – By tightening needle screw* failed to understand that, this remedy is done when the needle breaks during sewing.

- (iv) *You are asked to address the school assembly on daily cleaning tasks. How is this task performed?*
- A It involves thorough cleaning of furniture.*
 - B It covers the process of sweeping and moping.*
 - C It includes painting of walls and ceilings.*
 - D It involves the cleaning of doors and windows.*

The correct answer was *B - It covers the process of sweeping and moping*. The students who chose the correct answer were aware that daily cleaning involves removing loose dirt and can be done by sweeping and moping the floor. Those who chose *A - It involves cleaning of furniture* and *D - It involves the cleaning of doors and windows* did not understand that these tasks were for weekly cleaning. Furthermore, the students who chose *C - It includes painting of walls and ceiling* failed to understand that, the task is performed for special or occasional cleaning.

- (v) *There was an argument during group discussion in the class that “sautéing” is a process of cooking food. Which statement justifies the given argument?*
- A Cooking by using little fat to cover the bottom of the pan.*
 - B Cooking food by immersing completely in hot fat.*
 - C Cooking in a little hot fat in a covered pan on top of the cooker.*
 - D Cooking in an oven by heat radiant from a hot metal lining.*

The correct answer was *A - Cooking by using little fat to cover the bottom of the pan*. The students who chose the correct answer were aware that sautéing method, involves cooking in a hot pan with little fat. For those who opted for *B - Cooking food by immersing completely in hot fat* failed to

understand that the food is completely immersed in hot oil when deep frying. Those who opted for *C - Cooking in a little hot fat in a covered pan on top of the cooker* did not understand that the method is pot roasting. Furthermore, those who opted for *D - Cooking in an oven by heat radiant from a hot metal lining* did not understand that grilling method is the one using radiant from hot metal lining to cook food.

(vi) *You have been given the task to prepare a first aid kit for the home Economics department. Which sign would you put on it for its easy identification?*

A A red cross mark on the box

B Pictures of items in the box.

C A cross mark on both sides.

D Names of items in the box.

The correct answer was *A - A red cross mark on the box*. The students who chose the correct response were aware that a red cross mark is a recognizable symbol for first aid kit. Those who opted for *B – Pictures of items in the box* and *D – Names of items in the box* failed to understand that pictures and names are not the signs for first aid kit and the first aid contents vary depending on the need. For those who opted for *C – A cross on both sides* did not understand that it is not necessary to put a cross on both sides.

(vii) *Which type of inorganic refuse if not well disposed can be eaten by domestic animals and cause suffocation and death?*

A Trimmed trees

B Pruned grasses

C Empty bottles

D Plastic bags

The correct answer was *D - Plastics bags*. The students who chose the correct response had enough knowledge on the refuse and the ways of disposing. The students who opted for *A - Trimmed tree* and *B - Pruned grasses* failed to understand that, these were organic refuse and not inorganic refuse. Moreover, the students who chose *C - Empty bottles* failed to understand that empty bottles made from plastics, ceramic or glass material cannot be eaten by domestic animals, hence cannot cause suffocation and death. This implies that the students had inadequate knowledge on refuse disposal.

(viii) You visited your friend's tailoring school and were asked for advice on the right types of stitches to be embroidered on the part labelled A. What type of stitches would you recommend?



- | | | | |
|----------|--------------------------------|----------|---------------------------------|
| <i>A</i> | <i>Cross and stem stitches</i> | <i>B</i> | <i>Chain and stem stitches</i> |
| <i>C</i> | <i>Stem and French knot</i> | <i>D</i> | <i>Chain and satin stitches</i> |

The correct answer was *D – Chain and satin stitches*. The students who chose the correct response were able to understand that chain and satin stitches are used for filling different shapes such as stem, leaves and flowers. Likewise, chain stitch can be used to outline the shape, hence can be recommended for outlining the stem of the plant. Those who opted for *A – Cross and stem stitches* failed to understand that cross stitches are counted as embroidery stitches that are not commonly used to fill the curved stem or stalk. For those who chose *B - Chain and stem stitches* failed to understand that both chain and stem stitches are used to outline straight or curved lines and not suitable for filling shapes. Also, for those who opted for *C - Stem and French knot* failed to understand that stem is used for outlining while French knot is used to make flower centres, hence not suitable for the stem of the plant/flower.

(ix) Your grandmother asked you to repair her torn blanket. Which type of mending would you use to repair it?

- | | | | |
|----------|------------------------|----------|----------------------|
| <i>A</i> | <i>Flannel patch</i> | <i>B</i> | <i>Cotton patch</i> |
| <i>C</i> | <i>Applique' patch</i> | <i>D</i> | <i>Printed patch</i> |

The correct answer was *A - Flannel patch*. The students who chose correct response were able to understand that, flannel patch is strong flat patch as it sewn on with two rows of stitching. Thus, it is suitable for thick material like blanket. Those who chose *B – Cotton patch (plain patch)* had insufficient knowledge on the patch. They did not understand that cotton patch is used on woven garments especially clothes that require frequent washing. Those who opted for *C - Applique' patch* failed to understand that this patch is a decorative patch applied to conceal a torn or worn out area of a garment or an article. Additionally, the students who opted for *D -*

Printed patch were not aware that it is suitable on printed and patterned material of thin or medium weight.

(x) *The nutrition for expectant mother is important for the growth of the foetus in the womb. Which part provides nutrients to the foetus in the womb?*

A Uterus

B Placenta

C Umbilical cord

D Amniotic sac

The correct answer was *B – Placenta*. The students who chose the correct response had adequate knowledge about placenta as an organ separate from the foetus but develops during pregnancy. It provides nutrients from the mother to the foetus. Those who opted for *A - Uterus* failed to understand that, uterus is used for implantation of foetus and those who opted for *C - Umbilical cord* failed to understand that it is just a tube-like structure that connects the placenta and the mother. Moreover, those who chose *D - Amniotic sac* did not understand that the sac stores amniotic fluid for absorbing shock.

2.1.2 Question 2 Matching Items

This question consisted of five matching items derived from the topic of *An Ideal House*. The students were required to match the uses of cleaning equipment in List A with their corresponding names in List B by writing the letter of the correct response below the corresponding item number in the table provided.

The question was attempted by all 5,302 (100%) students. The data indicates that 1,298 (24.48%) students scored from 4 to 5 marks, 2,106 (39.72%) scored from 2 to 3 marks and 1,898 (35.80%) scored from 0 to 1 mark. Figure 2 represents this performance.

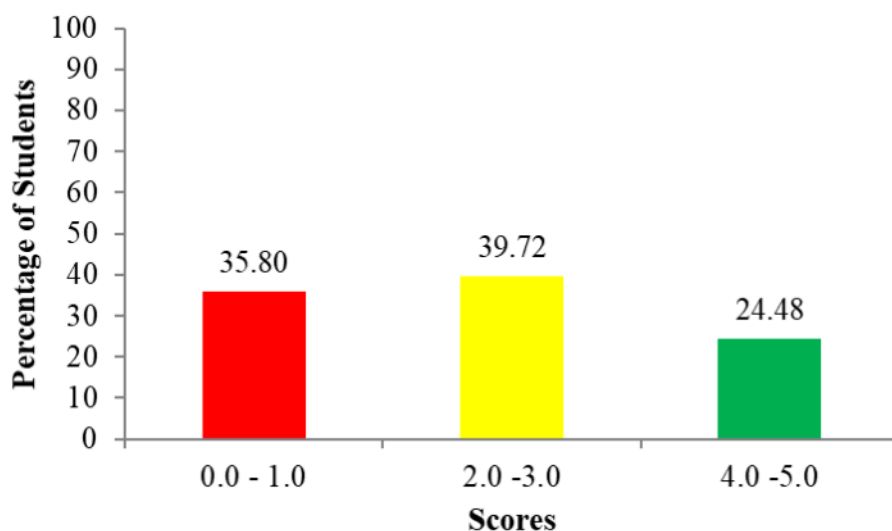


Figure 2: *The Students' Performance on Question 2*

Figure 2, shows that the students' general performance on question 2 was average since 64.20 per cent of the students scored average or above. This performance shows that students had sufficient knowledge on the use of different cleaning equipment.

Item (i) required the students to match the statement that stated: *Long handled broom used for cleaning the ceiling and the wall* with one of the alternatives given. The correct respond was *B - Cobweb brush*. The students who correctly matched it, understood that there are various types the of long handled brooms used in different ways. But long handled broom for ceiling and wall is cobweb brush. This indicates that these students had sufficient knowledge on the use of cleaning equipment especially for long handled brooms. Those who failed to match correctly, they did not understand that cobweb brush is used to clean the ceiling and the walls.

Item (ii) required the students to match the statement which stated: *Mid ribs of palm of coconut leaves used for sweeping all types of floor* with one of the alternatives given. The correct response was *C - Hand broom*. The students who correctly matched it, understood that midribs of palm of coconut leaves are used for sweeping all types of floor, with the soft ones for smooth floor and the hard sticks for rough floor. Those who matched incorrectly failed to understand the uses of mid ribs of palm of coconut leaves in cleaning a house.

In item (iii) the students were required to match the statement which stated: *A type of cleaning equipment used to remove loose dirt from carpets and rugs* with one of the alternatives given. The correct response was *H - Vacuum cleaner*. The student who correctly matched the statement, understood the roles of a vacuum cleaner which is removing loose dirt from the carpet and rugs. Those who matched a carpet brush failed to understand that, carpet brush is designed to loosen dirt on the carpet and rugs, but not for removing loose dirt.

Item (iv) required the students to match the statement which stated: *The equipment used to squeeze and reduce the amount of water from wet mops* with one of the alternatives given. The correct response was *D - Mop bucket*. The student who correctly matched them understood that mop bucket has a wringer that used to reduce the amount of water in the wet mops by squeezing. Those who matched with *E - mops* they failed to understand that mops are used for cleaning floors and not for reducing amount of water from wet mops.

In item (v) the students were required to match the statement which stated: *Pieces of cotton material used for removal of surface dirt or rubbing polished floor* with one of the alternatives given. The correct answer was *E - mops*. The students who matched correctly, were aware that mops are used to remove dirt or to scrub polished floor. Those who failed to match correctly this item did not understand that it is used for wiping floor or other surfaces.

2.2 Section B: Short Answer Questions

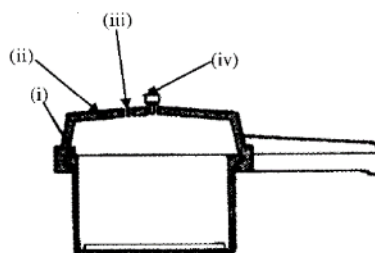
This section was comprised of seven compulsory short answer questions from seven topics namely; *The Kitchen, Maternal and Child Health, Sanitation in the House, Basic Sewing Stitches, Introduction to Sewing, Laundry and Food and Nutrition*. Each question had 10 marks, making a total of 70 marks.

2.2.1 Question 3: The Kitchen

The question assessed the students' competence on the use of a pressure cooker. The question stated that;

In your family kitchen there is a pressure cooker, your mother is worried to use it because of explosion experience. Advise her on how to use it properly by:

(a) *Labelling the parts of the given diagram of pressure cooker.*



(b) *Explaining the function of each part labelled in part (a).*

(c) *Outlining six steps for using it properly.*

The question was attempted by all 5,302 (100%) students. Among them 4,525 (85.35%) students scored from 0 to 2.5 marks, 721 (13.59%) scored from 3 to 6 marks and 56 (1.06%) scored from 6.5 to 10 marks. This performance is summarized in Figure 3.

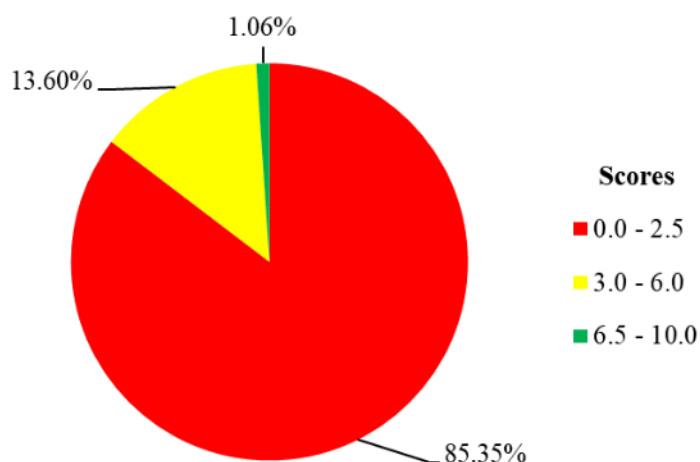


Figure 3: *The Students' Performance on Question 3*

Figure 3 shows that the general performance in question 3 was poor since majority (85.35%) of the students scored below average. This indicates that most of the students had inadequate knowledge of the kitchen equipment and their uses, especially pressure cooker. The data also show that, 2,353 (44.38%) students scored zero. In part (a) majority of students failed to label the parts of the given diagram of pressure cooker. For example, one student labelled; *pan, oven* and *pressure cooker*. Another student wrote irrelevant labels such as *heat top, immersing bottom*. Another one wrote the parts of the foetus in the womb such as *uterus, umbilical cord, amniotic fluid sac* and *placenta* which were copied from question 1 (x). Another student provided the kitchen plan such as *U - kitchen plan, G - kitchen plan, labelling and kitchen*. These responses show that these students were not aware about the parts of the pressure cooker. Furthermore, some students mixed up the parts of the pressure cooker. For example, one student wrote; (i) *Handle helper* (ii) *Cover* (iii) *Pressure regulator* and (iv) *Vent pipe* instead of *sealing ring, overpressure plug, air vent* and *pressure regulator* respectively.

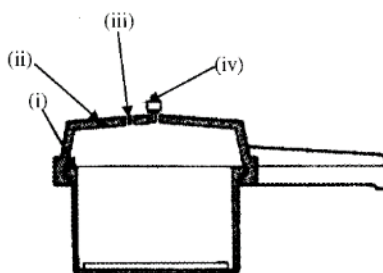
In part (b) students were required to explain the function of each part labelled in part (a). However, the students who failed in labelling could not respond correctly to this part. The analysis further shows that, some students failed to comprehend the question. For example, one student wrote; *lead - is used to cover the pressure cooker, pan - it allow air to move inside and outside, oven - used for measuring heat* and *pressure cook - its stay up of the lead its allow small air to move outside*. Other students provided irrelevant responses. For example, one student wrote; *it is used for measuring cook, measuring clothes, it is used for measuring drinking clothes*. Another student wrote; *it used for to experience, it used to save time, it used to cook food, job for cooking*. Other students provided kitchen plans such as *U - kitchen plan, pressure cooker, G - kitchen plan, scrubbing kitchen, labelling kitchen plan*. These students demonstrated inadequate knowledge about the functions of parts of the pressure cooker.

In part (c) most of the students misunderstood the question as they provided different methods of cooking instead of the steps for using pressure cooker. For example, one student wrote; *frying, steaming, boiling, stewing, baking* and *roasting*. Other students provided the steps of cleaning the pressure cooker instead of steps of using it. For example, one student wrote; *remove stubborn stains, add the juice of lemon in the pot, cook at high pressure,*

remove from heat then wash as usual. Some of them provided the advantages of using pressure cooker while others gave the factors to consider when buying a pressure cooker. Moreover, some students provided irrelevant responses for the question such as *it is used for measuring, it used for cook food, it used measuring in the temperature, it is used for cooking anything*. This implies that students lacked enough practice on using the pressure cooker, hence failed to answer the question correctly. Extract 3.1 is a sample of incorrect responses from the script of one of the students.

3. In your family kitchen there is a pressure cooker. Your mother is worried to use it because of explosion experience. Advise her on how to use it properly by:

(a) Labelling the parts of the given diagram of a pressure cooker.



- (i) Rubber
- (ii) heat regulator
- (iii) Steam regulator
- (iv) Pressure cooker

(b) Explaining the function of each part labelled in part (a).

- (i) Rubber-ensures that the lid is fitted well on the pressure cooker and air does not come out.
- (ii) heat regulator - It regulates the amount of heat in the pressure cooker.
- (iii) steam regulator- It regulates the amount of steam in the pressure cooker.
- (iv) Pressure cooker. It regulates the amount of pressure regulated in the pressure cooker.

(c) Outlining six steps for using it properly.

- (i) When finished or done using the pressure cooker you clean it properly.

- (ii) The pressure cooker should be kept in a well stored place.
- (iii) When the pressure cooker is finished for use you switch off, so that it could not cause any electrical faults.
- (iv) The pressure cooker should be handled with care when operating it.
- (v) The pressure cooker should be kept in a dust free space.
- (vi) The pressure cooker should be kept in its convenient appropriate place.

Extract 3.1: A sample of incorrect responses to Question 3

In Extract 3.1, the student provided incorrect responses in all parts of the question. In part (a) the student gave incorrect labeling. In part (b) he/she provided incorrect functions and in part (c) he/she provided care of the pressure cooker instead of steps to follow on using a pressure cooker, hence scored low marks.

Despite the poor performance shown in question 3, there were 777 (14.65%) students who scored from average or above. In part (a), some of the students labelled correctly the parts of the given diagram of pressure cooker. These students demonstrated sufficient practical experience on the use of pressure cooker which enabled them to provide the correct responses. Some of the correct responses in part (a) were *sealing ring, – used to tighten the pressure cooker to avoid pressure to escape, overpressure plug, – used to regulate the excess pressure and allow them to escape, air inlet – pressure regulator – used to regulate the pressure needed in pressure cooker*. These students had sufficient knowledge about the parts and its functions of pressure cooker

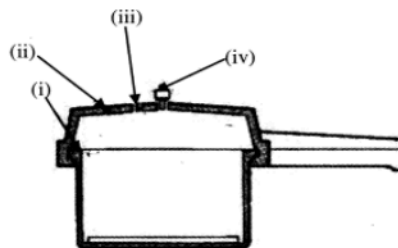
In part (c), most of the students outlined correctly six steps to follow when using pressure cooker. Therefore, they were aware of the use of pressure cooker. The steps that were mentioned are as follows; *put the food in the pressure cooker, cover the pressure cooker with lid too tight to avoid it from explosion, place the cooker to the electric cooker, removing the pressure cooker from electric cooker, wait until the pressure in the pressure cooker is reduced and then open the cover or lid*.

Another student wrote; *put a required amount of water for the food going to be cooked, do not overfill the pressure cooker with the food, put a required amount, cover well pressure cooker using the cover containing a seal, if the pressure applied is high reduce or regulate the pressure using the pressure regulator , after the food is cooked wait to open the food so as the pressure can settle to avoid accident, when opening the cover direct the cover away from your face to avoid accident caused by the steam from the cover.*

Extract 3.2 is another sample of the correct responses from the script of one of the students.

3. In your family kitchen there is a pressure cooker. Your mother is worried to use it because of explosion experience. Advise her on how to use it properly by:

(a) Labelling the parts of the given diagram of a pressure cooker.



- (i) Sealing ring.
- (ii) Overpressure regulator
- (iii) Air inlet
- (iv) Pressure regulator.

(b) Explaining the function of each part labelled in part (a).

- (i) It is used to tighten the pressure cooker to avoid pressure to escape.
- (ii) It is used to regulate the excess pressure and to allow them to escape.
- (iii) It is used to allow air to penetrate in the pressure cooker.
- (iv) It is used to regulate the pressure needed in the pressure cooker.

(c) Outlining six steps for using it properly.

- (i) Putting the food in the pressure cooker
-
-
-
-
-

- (ii) Cover the pressure cooker with a lid too tight to avoid it from explode.
- (iii) Place the pressure cooker to the electric or cooker.
- (iv) Do not loosen the lid it may cause the pressure cooker to doesn't it a function well.
- (v) Removing the pressure cooker from electric cooker.
- (vi) Wait until the pressure in pressure cooker is reduce and then open the cover or lid.

Extract 3.2: A sample of the correct responses to Question 3

In Extract 3.2, the student managed to provide the correct responses to most parts of the question. However, the explanations in part (c) were not satisfactory, hence failed to score all the 10 marks.

2.2.2 Question 4: The Kitchen

This question measured students' skills about preparation of juice using locally available equipment. The question stated that:

While in the forest attending a scout training camp, your leader picked passion fruit from a plant and gave it to you with a bottle of water to prepare juice

- (a) *Briefly describe how you would prepare the juice (give four points)*
- (b) *Suggest six kitchen equipment and for each show how it is used in preparing the same kind of juice at home*

The question was attempted by 5,302 (100%) students. The analysis shows that 1,664 (31.38%) students scored from 6.5 to 10.0 marks, 2,447 (46.16%) scored from 3.0 to 6.0 marks and 1,191 (22.46%) scored from 0 to 2.5 marks. This performance is represented in Figure 4.

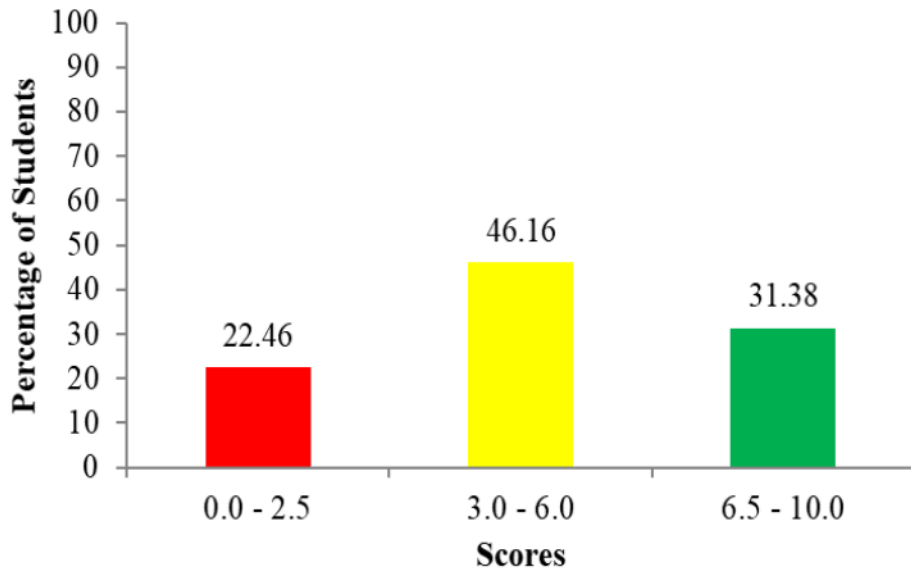


Figure 4: *The Students' Performance on Question 4*

The general performance on this question was good since 77.54 per cent of the students scored from average or above. This is an indication that these students had adequate knowledge on the use of locally available equipment to prepare passion juice and the equipment used to make passion juice at home. However, some failed to provide sufficient description on how to prepare juice, hence scored averagely.

The analysis shows that the student with good performance managed to describe how to prepare passion juice using a bottle in part (a). Some correct responses provided were *washing the fruits, add water and fruits in a bottle and stir well, sieve the mixer so as to remove seed, add some sugar, leave it for some minutes and serve it to people*. The students who managed to answer this part of the question, had enough knowledge about preparation of juice using locally available equipment like water bottle.

In part (b) most of the students managed to suggest kitchen equipment used to prepare passion juice at home. They had sufficient knowledge on the kitchen equipment and their uses. The correct responses provided were such as *basin for keeping passion, spoon for mixing fruit and water, sieve for filtering passion seed from juice, knife for cutting passion fruits, jug for storing juice and cup for drinking juice, a bowl used to collect seed from*

fruits and a blender to grind the fruits. Extract 4.1 is a sample of the correct responses from the script of one of the students.

4. While in the forest attending a scout training, your leader picked passion fruits from a plant and gave it to you with a bottle of water to prepare juice.

(a) Briefly describe how you would prepare the juice? (Give four points).

(i) Cut the passion into two pieces and remove the seeds from the passion.

(ii) After removing the seeds you keep them in the bottle of water.

(iii) Mix properly the mixture of water and passion seeds.

(iv) Left the mixture to settle then remove the passion juice from the bottle leaving passion seed down.

(b) Suggest six kitchen equipment and for each show how it is used in preparing the same kind of juice at home.

(i) Knife can be used for cutting the passion into pieces before blending.

(ii) Spoon can be used for mixing sugar after blending the juice but also removing of the contents from the passion.

(iii) Blender: Is used for blending the juice so as it particles become soft.

(iv) Strainer. It is used for straining the juice so as to remove the particles left after blending.

(v) Bowl: Can be used to keep the passion seeds before blending and after blending to keep the juice.

(vi) Jug: Is used to store the passion juice after blending it.

Extract 4.1: A sample of the correct responses to Question 4

In Extract 4.1, the student managed to describe correctly how to prepare juice using locally available equipment in part (a). He/she was able to suggest six kitchen equipment and their uses in preparation of juice in part (b).

On the other hand, the analysis indicates that 1,191 (22.46%) students had weak performance. Among them 374 (7.05%) student scored zero. Most of the students failed to understand the demand of the question. In part (a) some of the students described the normal way of preparing juice at home. For example, one of the students wrote; *wash the fruits, cut the passion fruit, squeeze the passion fruits then filter the liquid*. Another student wrote; *keep the passion fruits with some water, blend juice using a blender and mix it, add sugary staff, filter the juice to remove unwanted materials*. Other student provided irrelevant responses such as; *it helps avoiding energy with preparing juice, it helps to common areas which save the nutrients, avoiding the energy to the nutrient*. Others copied text from other questions. For example, one student wrote norms of good manners which were alternatives in question 1(i) such as *greeting elders, helping adult and hooliganism, greeting elders, helping adult and hooliganism, greeting elders, alcoholism and thankful, greeting elders, helping adult and be honest, greeting elders, thankful and drug abuse*. All these responses were incorrect. Extract 4.2 is a sample of incorrect responses from the script of one of the students.

4. While in the forest attending a scout training, your leader picked passion fruits from a plant and gave it to you with a bottle of water to prepare juice.

(a) Briefly describe how you would prepare the juice? (Give four points).

(i) *Ammiaticae sac*

(ii) *umbilical cord*

(iii) *placenta*

(iv) *uterus*

(b) Suggest six kitchen equipment and for each show how it is used in preparing the same kind of juice at home.

(i) *Cotton patch*

(ii) *flannel patch*

(iii) *pruned grasses*

(iv) *plinted patch*

(v) *Applique patch*

(vi) *Trimmed trees trees*

Extract 4.2: A sample of incorrect response to Question 4

In Extract 4.2, the student failed to provide the correct response to all parts of the question. He/she provided the parts of the foetus in part (a) and different types of patches in part (b), hence scored low marks. The responses provided indicate inadequate knowledge and skills on the use of different kitchen equipment and locally available equipment used for preparation of passion juice.

2.2.3 Question 5: Maternal and Child Health

The question measured students' competence on maternal and child health. The question stated that:

Teenage pregnancies should be discouraged in order to improve the health of adolescent girls. Support this statement by:

(a) explaining the pregnancy risks of teenage girls. (Give four points).

(b) outlining four danger signs in pregnancy for teenagers.

(c) explaining how to discourage teenage pregnancies (give two points).

The question was attempted by 5,302 (100%) of the students. The analysis shows that 789 (14.88%) students scored from 6.5 to 10.0 marks, 1,933 (36.46%) scored from 3 to 6.0 marks and 2,580 (48.66%) scored from 0 to 2.5 marks. Figure 5 summarizes the students' performance in this question.

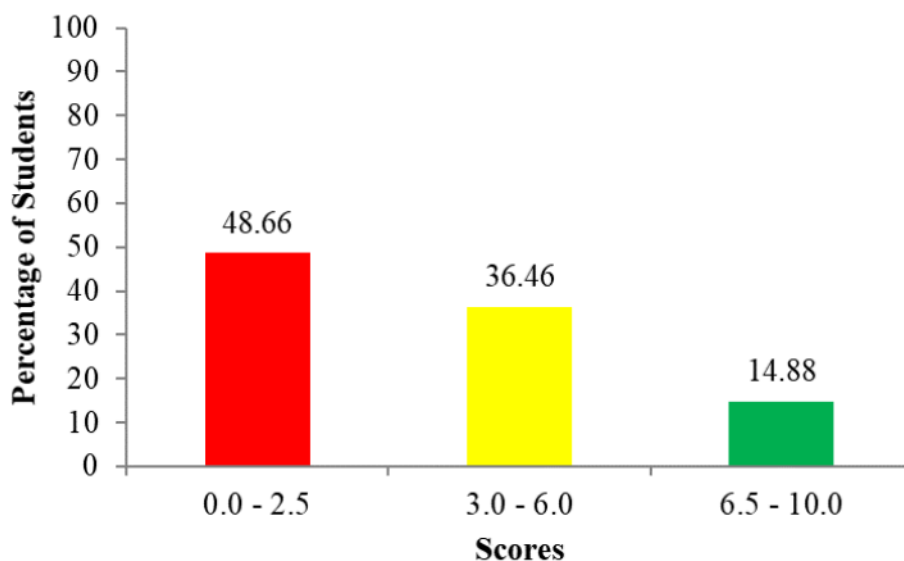


Figure 5: *The Students' Performance on Question 5*

Figure 5 shows that the general performance of this question was average since 51.34 per cent of the students scored from average or above. This shows that the students had sufficient knowledge about teenage pregnancies.

The analysis shows that the majority of students with good performance in this question managed to give the correct explanations on pregnancy risk of teenage girls in part (a). Some of the correct responses were *premature babies, death, complication during delivery and lack of providing basic requirement, adolescent girl may fail to provide basic needs, parent care to the children, still birth, low birth weight baby, pre-eclampsia and anaemia*. These students had enough knowledge on pregnancy risks for teenage girl.

In part (b) most of the students were able to outline correctly four danger signs in pregnancy for teenage, some of the signs outlined were *vaginal bleeding, oedema, discharge of amniotic fluid before expected delivery date, high blood pressure, severe abdominal pain, back ache and excessive vomiting*. These students had sufficient knowledge about the danger signs in pregnancy.

In part (c) the students managed to explain how to discourage teenage pregnancy. Examples of the correct responses were *by providing education to adolescent girls on how to take care of themselves against teenage pregnancies, enact laws and principles that will prohibit teenage pregnancies and through women empowerment campaigns and reporting all sexual harassment and abuse to the appropriate institution, parents and guardians*. These students understood ways of discouraging teenage pregnancies. Extract 5.1 is a sample of the correct responses from the script of one of the students.

5. Teenage pregnancies should be discouraged in order to improve the health of adolescent girls. Support this statement by:

(a) Explaining the pregnancy risks of teenage girls. (Provide four points).

(i) Girls may face complication during delivery as the sex organs are not well matured

(ii) Still birth and pre-mature babies may occur.

(iii) May cause death to a mother or a child or both.

(iv) A girl will be not able to provide basic needs and care to the children.

(b) Outlining four danger signs in pregnancy for teenagers.

(i) Vaginal bleeding.

(ii) discharge of amniotic fluid before the due delivery date.

(iii) High blood pressure.

(iv) Excessive vomiting which persist more than 3 month.

(c) Explaining how to discourage teenage pregnancies. (Give two points).

(i) By giving adequate education to girls about the dangers of early pregnancies.

(ii) Implementing rules and laws for those who give pregnancies young girls.

Extract 5.1: A sample of the correct responses to Question 5

In Extract 5.1, the student managed to provide the correct responses to all parts of the question. In part (a) he/she managed to explain the pregnancy risk of teenage girls. In part (b) the student outlined correctly the danger signs of pregnancy for teenagers. Moreover, the student was also able to explain how to discourage teenage pregnancy.

On the other hand, 2,580 (48.66%) students had weak performance. Among them 16.18 per cent scored zero. This was partly contributed by some of the students misinterpreting the demand of the question. For example, in part

(a) one student provided the good grooming practices instead of pregnancy risks of teenage girls as he/she wrote; *doing exercise regularly, go for the medical treatment, eating balanced diet and don't use alcoholism*. Another student provided different types of stitches such as *sewing machine stitches, temporary stitches, neatening stitches and embroidery stitches*. Other students failed to understand the demand of the question. For example, one student gave the economic and psychological effect of teenage pregnancies and others provided the health rules such as *avoid alcohol drinks, do moderate works, eat foods rich in iron and calcium and eat fibres to avoid constipation*.

In part (b), the students misinterpreted the demand of the question. For example, one student provided hazard/warning signs instead of danger signs of pregnancy for teenage girls as he/she wrote; *toxic, oxidant and harmful*. Other students provided the signs of pregnancy such as *enlargement of the abdomen, vomiting, missing of menstrual period, food cravings, back ache and frequent urination*. Furthermore, some of the students provided the signs of maturity for girls. For example, one student wrote; *starting period, shape enlarge and voice become soft*. This shows that these students had insufficient knowledge of danger signs in pregnancy for teenagers.

In part (c) some of the students misunderstood the question requirements. For example, one student gave the impact of early pregnancy instead of ways to discourage teenage pregnancies. He/she wrote; *dropout of school, death*. Others lacked sufficient knowledge about ways of discouraging teenage pregnancies. For example, one student wrote; *they aid in digestion and prevent constipation, they build up the body and repair worn out tissue*. Which were copied from question 1 (ii). Another one wrote; *cooking by using little fat to cover the bottom* which copied from question 1 (v). This implies that these students had insufficient knowledge on the ways of discouraging teenage pregnancies. Extract 5.2 is a sample of incorrect responses from the script of one of the students.

5. Teenage pregnancies should be discouraged in order to improve the health of adolescent girls. Support this statement by:

(a) Explaining the pregnancy risks of teenage girls. (Provide four points).

- (i) lack of Education: You may be chased out of school because your pregnancy.
- (ii) Segregation: People will segregate you because you are pregnant while still a child.
- (iii) Disrespected: People will disrespect you because you had bad decision.
- (iv) Lack of support: you will not get a good support because of improper behaviour.

(b) Outlining four danger signs in pregnancy for teenagers.

- (i) Not getting your menstruation cycle.
- (ii) severe vomiting and headache.
- (iii) visiting toilet severely.
- (iv) changes on your body parts and feeling dizziness.

(c) Explaining how to discourage teenage pregnancies. (Give two points).

- (i) Pregnancies ruins your future plans and may chase you out of school.
- (ii) Avoid bad influence to bad peer groups on life letting you do bad things.

Extract 5.2: A sample of incorrect responses to Question 5

In Extract 5.2, the student misinterpreted the demand of the question. In part (a) the student wrote effects of bad behaviours instead of the pregnancy risks of teenage girls. In part (b), he/she provided signs of pregnancy instead of danger signs in pregnancies. Moreover, the student provided the impact of early pregnancies instead of ways to discourage teenage pregnancies in part (c). Hence scored low marks. These responses show that the student had inadequate knowledge about pregnancy risks and danger signs and how to discourage teenage pregnancy.

2.2.4 Question 6: Sanitation in the Home

The question measured students' knowledge of the communicable diseases. The question stated that:

In your school there is a disease outbreak caused by drinking water contaminated with amoeba cyst. Clarify to your head of school on:

- (a) the five symptoms that would be observed to students.*
- (b) (i) the name of the disease which students are suffering from.
(ii) how is the disease spread? (Give two points).*
- (c) the five ways to reduce the risk of the disease from reoccurring.*

The question was attempted by 5,302 (100%) students who sat for this paper. The analysis shows that 1,624 (30.63%) students scored from 6.5 to 10.0 marks, 2,562 (48.32%) scored from 3.0 to 6.0 marks and 1116 (21.05%) scored from 0 to 2.5 marks. Figure 6 illustrates this performance.

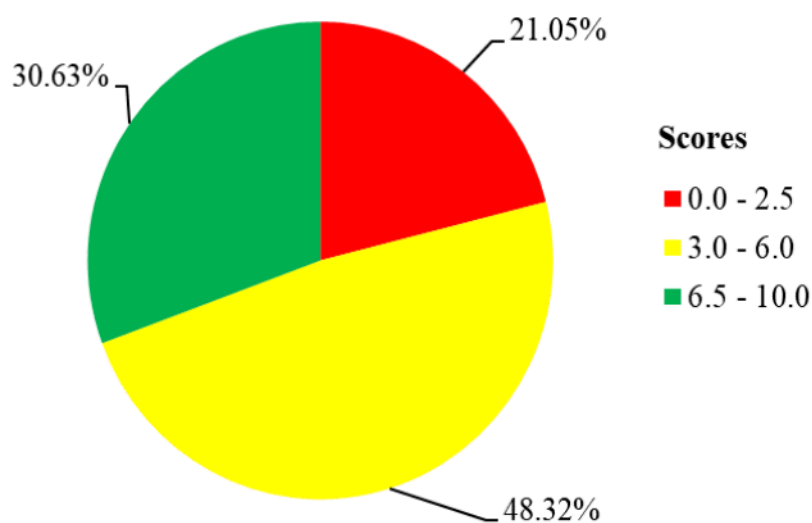


Figure 6: *The Students' Performance on Question 6*

Figure 6 shows that the general performance on this question was good since 78.95 per cent of the students scored from average or above. This implies that most students had sufficient knowledge about the communicable diseases, especially amoebic dysentery.

These students correctly clarified the symptoms of the diseases in part (a). Some of the responses provided were *abdominal pain, diarrhea, vomiting,*

fever, loss of appetite, dehydration. The students were aware that the symptoms like vomiting and diarrhea can be caused by contaminated water. In part (b) (i) the students correctly named the disease as most of them wrote amoebic dysentery. These students understood that the amoeba is a parasite that causes amoebic infection.

Furthermore, most of the students managed to describe how the disease is spread in part (b) (ii). For example, one student provided correct responses such as *it can be spread through contaminated food and water and it can be caused through poor sanitation in the environment.* Another student wrote; *Through drinking contaminated water and through eating or ingesting of contaminated food.* Other correct responses provided were *eating uncooked fruits and vegetables without washing properly, improper disposal of human waste such as faeces and poor storage of food and drinking water.* These students had sufficient knowledge about food and water contamination.

In part (c), some of the students correctly managed to explain different ways to reduce the risk of the disease from reoccurring. For example, one student wrote;

Use of clean and safe water for drinking, observing of hygiene process and sanitation, make sure that the equipment used in preparation of food are clean, food should be well stored to avoid contamination, proper disposal of human excretes since it can easily spread the diseases and wash the fruits with clean, safe water before taking or ingesting them.

Another student wrote; *proper disposal of human waste, boiling or treating water so as to kill germs and microorganisms, wash hands after visiting toilet, wash fruits and vegetables with clean water before eating and water should be treated in order to kill germs, wash hands with soap and water before eating and observe food and personal hygiene.* Extract 6.1 is a sample of another good responses from one of the students.

6. In your school there is a disease outbreak caused by drinking water contaminated with amoeba cyst. Clarify to your head of school on:

(a). The five symptoms that would be observed to the students.

- (i) Diarrhoea
- (ii) Vomiting
- (iii) Nausea
- (iv) High fever
- (v) stomach-ache.

(b) (i) The name of the disease which students are suffering from.

Amoebic dysentery

(ii) How is the disease spread? (Give two points).

- The disease is spread through eating of contaminated food and drinking contaminated drinks.
- The disease is spread through, to not washing hands after visiting toilets and before eating.

(c) The five ways to reduce the risk of the disease from reoccurring.

- (i) Drinking boiled or clean and safe water
- (ii) Eating well preserved food.
- (iii) Washing hands after visiting toilets with clean and safe running water with a soap.
- (iv) Washing hands before and after taking a meal with clean and safe running water.
- (v) Cleaning of toilets with soaps so as to kill the germs.

Extract 6.1: A sample of the correct responses to Question 6

In Extract 6.1, the student correctly managed to provide the possible symptoms in part (a). He/she gave the correct name of the disease in part (b) and the ways to prevent the spread of the disease in part (c).

On the other hand, 1,116 (21.05%) students scored poorly. Some of the students provided the function of nutrients in the body instead of the symptoms of the disease in part (a). For example, one student wrote; *for body building, for energy giving and for protecting the body*. Another

student provided different types of infection instead of the symptoms. Others wrote irrelevant responses. For example, one student wrote; *it involves thorough cleaning a furniture, it covers the process of sweeping and moping, it includes painting of walls and ceiling, it involves the cleaning of doors, window.* These responses were copied from question 1 (iv). This implies that the students had insufficient knowledge about water contamination.

In part (b) (i), most of the students in this category named the disease as *malaria*. They failed to differentiate the signs of malaria with that of amoebic dysentery. These students also failed to realize that malaria is not caused by drinking contaminated water. Other students wrote; *bilharzia* and *cholera*.

In part (b) (ii) the students failed to explain the ways in which the disease can be spread. For example, one student wrote; *death and increased of loss of blood.* Another student wrote; *having still birth, poor health for mother and the child.* These students failed to realize that the mentioned points were the pregnancy risks of teenage girls. Other student gave the types of diseases such as *communicable diseases, non-communicable diseases.* Some of them provided irrelevant responses such as '*malaria is spread through water surface, they have poor water purification.* These responses show that the students had insufficient knowledge on how amoebic dysentery spreads.

Moreover, it was revealed that, these students lacked sufficient knowledge about prevention of amoebic dysentery from reoccurring in part (c). Some of them provided irrelevant responses. Instead of the ways to reduce the risk of the disease from reoccurring, some students wrote the parts of a sewing machine. For example, one student wrote; '*needle clump, wheel balance, spool pin, tension guide, slide plate and presser foot.* Other students misunderstood the demand of the question as some of them provided different type of infectious diseases. For example, one student wrote; *cholera, corona, COVID-19, HIV/AIDS and amoeba.* These students had insufficient knowledge on prevention of amoebic dysentery. Extracts 6.2 is another sample of incorrect responses from one of the students.

6. In your school there is a disease outbreak caused by drinking water contaminated with amoeba cyst. Clarify to your head of school on:

(a) The five symptoms that would be observed to the students.

- (i) Malaria
- (ii) uterus
- (iii) Placenta
- (iv) Amniotic sac
- (v) Umbilical cord

(b) (i) The name of the disease which students are suffering from.

Malaria

(ii) How is the disease spread? (Give two points).

- Malaria was the people water surface
- They have poor water purification

(c) The five ways to reduce the risk of the disease from reoccurring.

- (i) tension screw
- (ii) needle screw
- (iii) tightening tension screw
- (iv) threading correctly
- (v) loosening tension screw

Extract 6.2: A sample of incorrect responses to Question 6

In Extract 6.2, the student provided irrelevant responses to all parts of the question. Some of the responses in part (a) were the parts of the foetus. In part (c), the student wrote the parts of the sewing machine and remedies which can be done to rectify different sewing machine faults. These responses show that the student had inadequate knowledge about diseases caused by drinking contaminated water.

2.2.5 Question 7: Basic Sewing Stitches

The question measured students' competence in the use of temporary stitches used for transferring pattern marking to the fabric and groups of permanent hand stitches. The question stated that:

You are invited at a nearby school to assist the sewing beginners' class on hand stitching. Assist them by:

- (a) *briefly describing two types of temporary stitches used to transfer pattern marking to the fabric.*
- (b) *describing three groups of permanent hand stitches. Provide one types of stitches in each group.*

A total of 5,302 students (100%) attempted the question. Among them 4,146 (78.20%) students scored from 0 to 2.5 marks. In addition, 886 (16.71%) students scored from 3.0 to 6.0 marks and 270 (5.09%) scored from 6.5 to 10 marks. Figure 7 illustrates this performance.

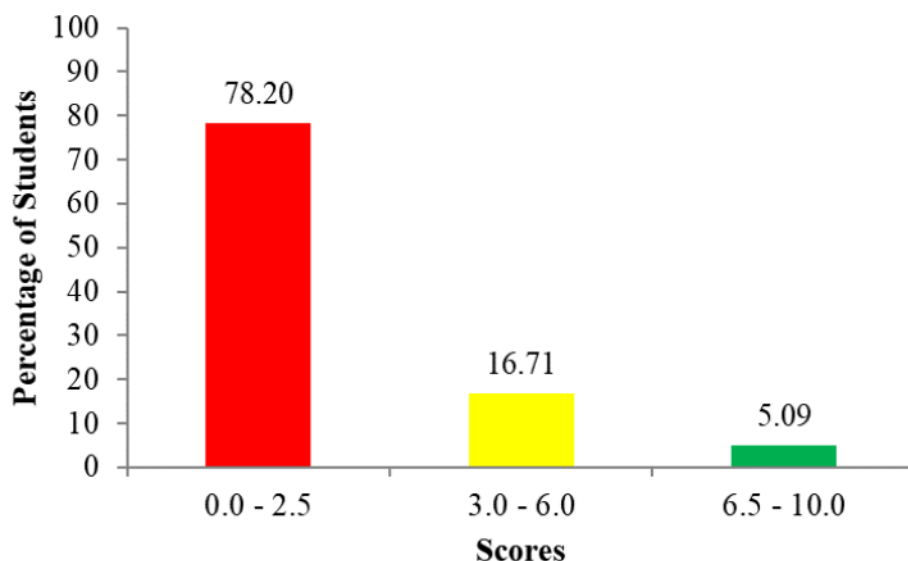


Figure 7: *The Students' Performance on Question 7*

Figure 7 shows that the general performance on this question was poor since 78.20 per cent of the students scored below average. This indicates that the students had inadequate knowledge about the basic sewing stitches, especially the groups of permanent stitches and temporary stitches used to transfer marking to the fabric. In part (a), most of the students misinterpreted the demand of the question. Some of them provided the

examples of temporary stitches used for tacking instead of the ones used to transfer pattern markings. For example, one of the students wrote; *even temporary stitches* and *long and short temporary stitches*. Another student gave the permanent hand sewing stitches as he/she wrote; *back stitches* and *running stitches*. Others provided the embroidery stitches such as *chain stitch* and *satin stitch*. In addition, some of them provided the neatening stitches such as *hemming stitches* and *overcasting stitches*. Furthermore, some of the students provided irrelevant responses such as *repeating stitches*, *hand sewing*, *type of the cloth to be stitched*, *type of instrument to be used* while others left this part unanswered.

In part (b) most of the students also failed to understand the demand of the question. Some of them provided examples of decorative stitches. For example, one student wrote; *chain stitch*, *satin stitch* and *French knot* instead of permanent hand stitches. Another student gave the group of permanent machine stitches by machine such as machine stitches, *zig zag* and *overlocking* instead of permanent hand stitches. Others wrote method of repairing clothes such as *darning* and *patching*. Some provided irrelevant responses such as *direct stitches*, *indirect stitches*, *thimble patch*, *threaded patch*, *control stitch*. All of the responses are irrelevant, indicating that these students had inadequate knowledge about basic sewing stitches. Extract 7.1 is a sample of incorrect responses from the script of one of the students.

7. You are invited at a nearby school to assist the sewing beginners' class on hand stitching. Assist them by:

(a) Briefly describing two types of temporary stitches used to transfer pattern marking to the fabric.

(i) ... Backstitch ... hemming

.....

.....

(ii) ... Decorative hemming

.....

.....

(b) Describing three groups of permanent hand stitches. Provide one types of stitches in each group.

(i) ... Even ... stitches

.....

.....

(ii) ... Uneven ... stitches

.....

.....

(iii) ... Diagonal ... stitches

Extract 7.1: A sample of incorrect responses to Question 7

In Extract 7.1, part (a) the student provided the permanent stitches instead of the temporary stitches used to transfer pattern markings in part. He/she also provided some examples of stitches instead of groups of permanent stitches in part (b), hence scored low marks.

Despite the weak performance on this question 21.8 per cent of the students performed average or above. These students had sufficient knowledge about stitches, especially hand stitches. In part (a), some of the students managed to provide the correct two types of temporary stitches used to transfer pattern marking to the fabric. For example, one student wrote *'thread marking stitches – used to mark pleats, fitting lines and tucks, tailors tacking – used to mark position for notches and dart line*. Others wrote; *tailors tacking is used to mark position of dart, thread marking use to mark the pleat lining, thread marking is used for marking straight line on the fabric.*

In part (b) some of the students demonstrated adequate knowledge of the groups of permanent hand stitches. The responses provided were *joining stitches* example, *back stitch* and *embroidery stitches* example, *lazy daisy stitches*. Other responses were such as *joining stitches, example over sewing, neatening stitches example loop stitches, embroidery stitches examples chain stitches*. These responses demonstrate students' adequate knowledge about basic sewing stitches. Extract 7.1 is a sample of the correct responses from the script of one of the students.

7. You are invited at a nearby school to assist the sewing beginners' class on hand stitching. Assist them by:

(a) Briefly describing two types of temporary stitches used to transfer pattern marking to the fabric.

(i) Tailor tacking.
This a temporary stitch which help in transferring marks in places such as darts.

(ii) Thread marking tacking.
It's temporary stitch which is used for marking straight lines on the fabric.

(b) Describing three groups of permanent hand stitches. Provide one types of stitches in each group.

(i) Embroidery stitches
These are stitches which are used as decorations or for decorative purposes example is satin stitch

(ii) Neatening stitches
These are the stitches which are used for finishing raw edges of the fabric to prevent it from fraying example hemming stitches.

(iii) Joining stitches.
These are stitches which are used for joining layers of materials and pieces of materials example back stitches.

Extract 7.2: A sample of the correct responses to Question 7

In Extract 7.2, part (a) the student correctly described the types of temporary stitches used for transferring pattern markings. He/she also managed to describe three groups of stitches with example in each, hence scoring high marks. This student demonstrated adequate knowledge about basic sewing stitches.

2.2.6 Question 8: Introduction to Sewing

The question assessed the students' knowledge about small sewing equipment. The question stated that;

Your sister has a tailoring business and has employed you as a business manager. While working, you have noticed that most of the tailors do not have adequate knowledge about small sewing equipment. Assist them by:

- (a) *describing the features of the given equipment and provide their function*
 - (i) *Ripper*
 - (ii) *Tracing wheel*
 - (iii) *Pinking shear*
 - (iv) *A sewing gauge*
- (b) *explaining the difference between the cutting shears and trimming scissor.*
- (c) *suggesting features for the best cutting shear to be used for cutting fabric. Provide two points with reasons.*

The question was attempted by 5,302 (100%) students who sat for this paper. The data analysis shows that 4,177 (78.78%) students scored from 0 - 2.5 marks, 920 (17.35%) scored from 3 to 6 marks and 205 (3.87%) scored from 6.5 to 10 marks. This performance is summarized in Figure 8.

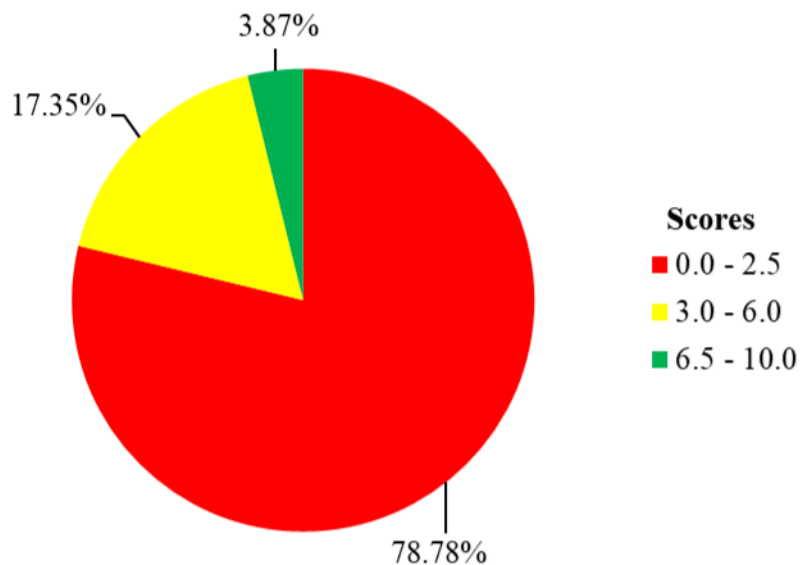


Figure 8: *The Students' Performance on Question 8*

Figure 8 shows that the general performance on this question was poor since 78.78 per cent of the students scored below average. This implies that these students had insufficient knowledge about sewing equipment, especially small equipment.

It was further revealed that among 78.78 per cent of the students who scored poor, 43.08 scored 0 mark, indicating lack of knowledge about the uses of small equipment given. The analysis show that some students wrote irrelevant responses as one student wrote; ripper – *used to neatening the raw edges of garment*, tracing wheel - *used to put the stitches mark*, pinking shear – *to cut dressing material or cloth*, a sewing gauge – *used to put the garment in place while sewing*. Others students mixed up the uses of various small equipment. For example, one student wrote; ripper – *is used in ripping fabric*, tracing wheel - *is used in measuring the fabric*, pinking shear – *is used cutting heavy materials and a sewing gauge – is used for taking body measurements*.

In part (b) most of the students mixed up the type of scissors. For example, one student wrote; *cutting shear is used to trim or cut loose threads while trimming scissors is used for cutting out fabrics only*. Another student wrote; *cutting shear is a scissor of neatening clothes while trimming scissor is used to cut material like hair*. Moreover, in part (c), some of the students failed to understand the demand of this part of the question. They provided the factors to consider when buying a pair of scissors instead of features. For example, one student wrote; *cutting shear should last longer, the cutting shear should not rust to avoid staining the garment*. Another student provided the uses of the cutting shear such as *it helps to cut fabric very well and it help to cut fabric in any shape and size* instead of the features. Other students left this part unanswered. These responses show that the students had insufficient knowledge about small sewing equipment, their uses and features. This implies that students lacked enough practice in using the sewing equipment. Extract 8.1 is a sample of incorrect responses from the script of one of the students.

8. Your sister has a tailoring business and has employed you as a business manager. While working, you have noticed that most of the tailors do not have adequate knowledge about small sewing equipment. Assist them by:

(a) Describing the features of the given equipment and provide their functions.

(i) Ripper
 It used to repair the material.

(ii) Tracing wheel
 It used to trace the garment / material.

(iii) Pinking shear
 It used to cut the fabric / garment.

(iv) A sewing gauge
 It used for ~~use~~ cutting the fabric.

(b) Explaining the difference between cutting shear and trimming scissor.

Cutting shear- It used to cut the small garments while trimming scissor- Are pair of scissor that is used to cutting a garments.

(c) Suggesting features for the best cutting shear to be used for cutting fabric. Provide two points with reasons.

(i) It help to cut fabric very well.

(ii) It help to cut fabric in any shape and size.

Extract 8.1: A sample of incorrect responses to Question 8

In Extract 8.1, the candidate provided incorrect responses to all parts of the question hence scored low marks.

On the other hand, the analysis indicates that few (21.22%) students scored from average or above. These students had sufficient knowledge about sewing equipment especially small equipment. In part (a) of the question they correctly provided the features and uses of the small sewing equipment provided. Some of the correct responses provided were Ripper- *has sharp point, used for opening seams and hems of a material*; Tracing wheel – *small hand-held equipment with a wheel with notched edges. Used with a tracing paper to transfer markings from patterns to fabric*. Pinking shear – *has zig zag blades, used for trimming raw edge of the fabric to prevent*

them from frying; A sewing gauge – it has markings, it is used to measure the size of hems and seams on the fabric.

In part (b), the students managed to differentiate cutting shear from trimming scissor. For example, one student wrote; *a cutting shear used in cutting straight piece of fabric while trimming scissor used for trimming raw edge of a fabric.* Another student wrote; *cutting shear used for cutting purpose while trimming scissor is for trimming purpose.* Another one wrote; *cutting shear used to cut pieces of fabric used to make garment while trimming scissor used to trim selvedge and cutting thread.*

In part (c), the students correctly suggested feature for the best cutting shear to be used for cutting fabric. For example, one student wrote; *should have sharp blades to make the cutting process easier and effective, one eye of its handle should be larger than the other eye for allowing two fingers to pass through when one is using it.* Another student wrote; *cutting shear is used to cut pieces of fabric ready for making a garment and it is long with sharp blades while trimming scissors is used to trim selvedges and cutting loose threads.* These responses indicate that the students were familiar with different types of scissors and their uses. Extract 8.2 is a sample of the correct responses from the script of one of the students.

8. Your sister has a tailoring business and has employed you as a business manager. While working, you have noticed that most of the tailors do not have adequate knowledge about small sewing equipment. Assist them by:

(a) Describing the features of the given equipment and provide their functions.

(i) Ripper

It contains of a wooden handle
- A ripper is used to undo stitches.

(ii) Tracing wheel

It contain a wheel structure that helps in tracing
Tracing wheel is used together with tracing paper
to transfer markings on the fabric.

(iii) Pinking shear

Is a pair of scissor made of zigzag blades.
- Pinking shear is used in neatening of raw edges.

(iv) A sewing gauge

It contains of some measurement and numbers on its ruler bar
- A sewing gauge is used in taking measurement of the hems and seams.

(b) Explaining the difference between cutting shear and trimming scissor.

Cutting shear is a type of scissors used for cutting purposes example cutting the fabric while
Trimming scissor is a type of scissor used for only trimming purposes.

(c) Suggesting features for the best cutting shear to be used for cutting fabric. Provide two points with reasons.

(i) A cutting ^{shear} should be sharp so as to make the cutting of fabrics easier and fast

(ii) A cutting shear should have long blades that are pointed to make penetrate to some parts of the garments or fabric and cut them easily

Extract 8.2: A sample of the correct responses to Question 8

Extract 8.2, part (a) shows that the student managed to describe the features of the given equipment and their functions. In part (b), he/she explained the differences between cutting shear and trimming scissor. While in part (c), the student suggested features for the best cutting shear to be used for cutting fabric, hence scored high marks.

2.2.7 Question 9: Laundry

This question measured students' competence in laundry procedures and understanding international care labels.

The question stated that: *Your mother complained about the new houseboy who had insufficient knowledge of laundering clothes, hence spoiled the quality of clothes. She requested assistance from you to instruct him on the ways of maintaining the quality of clothes during laundering.*

(a) *Suggest the appropriate preliminary procedure to be done before the washing process (Provide four procedures).*

(b) *Draw four care labels recommended for the drying procedure and give the meaning.*

The question was attempted by 5,302 (100%) students. Among them 1,334 (25.16%) scored from 6.5 to 10.0 marks. In addition, 1,759 (33.18%) students scored from 3.0 to 6.0 marks and 2,209 (41.66%) scored from 0 to 2.5 marks. Figure 9 illustrates this performance.

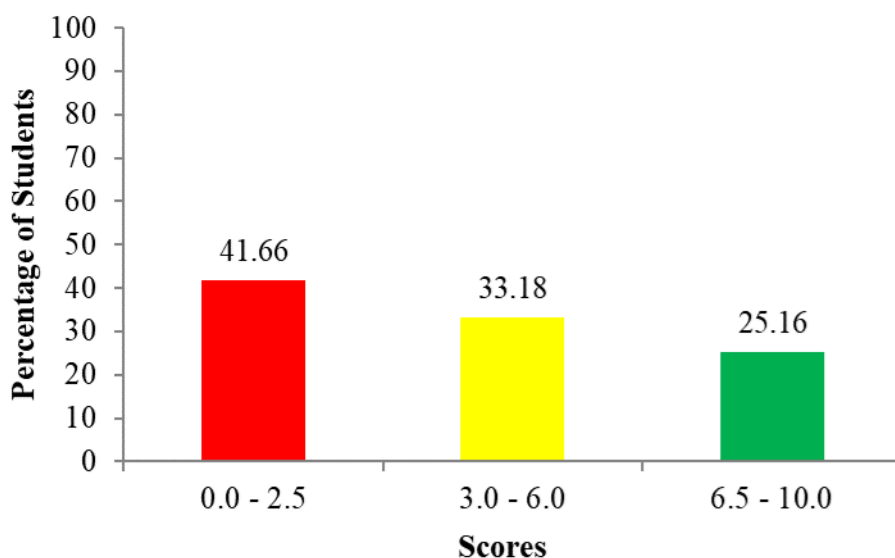


Figure 9: *The Students' Performance on Question 9*

Figure 9 shows that the general performance on this question was average since 58.34 per cent of the students scored from average or above. This signifies that the students had adequate knowledge about laundry procedures and international care labels.

In part (a), the analysis indicates that most of the students with good performance managed to suggest the appropriate preliminary procedures to be done before the washing process. The correct responses provided were such as *sorting the clothes*, *repairing the clothes*, *removing stain* and *soaking the clothes*. The students who provided such responses had sufficient knowledge about laundry procedures.

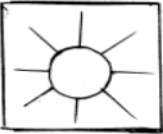


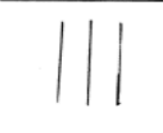
Moreover, students managed to draw the care labels recommended for the drying procedure and gave their meaning in part (b). Extract 9.1 is a sample of the correct responses from the script of one of the students.

9. Your mother complained about the new houseboy who had insufficient knowledge of laundering clothes, hence spoiled the quality of clothes. She requested assistance from you to instruct him on the ways of maintaining the quality of clothes during laundering.

(a) Suggest the appropriate preliminary procedures to be done before the washing process. (Provide four procedures).

- (i) ... Sorting out clothes : Before washing clothes they are sorted out according to the degree of dirt, detergent, temperature, washing method and its reactions.
- (ii) ... Repairing clothes : Before washing process, the clothes should be repaired so as to prevent prolonged tear or hole and to reinforce or replace a tear or hole on the fabric.
- (iii) ... Removing stains : Before washing process, the stains should be removed from the fabric or garment based on the nature of the stain and method of removing stain.
- (iv) ... Steeping (soaking) : Before washing process the clothes should be soaked so as to loosen dirt from the fabric and to soften the stains.

(b) Draw four care labels recommended for the drying procedure and give the meaning of each.

Drawing	Meaning
(i) 	Drying in the sun is allowed
(ii) 	Hang on clothesline is recommended.
(iii) 	Dry flat - for example knitted articles are dried flat
(iv) 	Trip dry - for example nylon clothes.

Extract 9.1: A sample of the correct responses to Question 9

In Extract 9.1, the student managed to suggest the appropriate preliminary procedure to be done before washing process in part (a). He/she correctly drew care labels recommended for the drying procedure and their meaning in part (b). Hence, he/she scored high marks.

On the other hand, the analysis shows that 41.66 per cent of the students with weak performance some failed to understand the demand of the question, hence provided the requirements needed for laundry instead of preliminary procedures to be done before washing process. For example, one student wrote; *clean water, soap or detergent, washing brush and washing stick*. Others explained the process of washing. For example, one student wrote; *before washing process you must be prepare the water, after preparing the water you should put the soap inside the water, after that you put your clothes inside the basin and after put your clothes inside the basin you cleaned your clothes by clean water and safe water*. Furthermore, some students gave irrelevant responses such as; *used for washing house, used for washing clothes, used for cooking food, used for drinking*. And some of them left this part of the question unanswered.


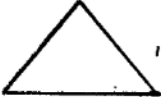
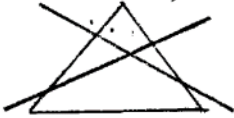
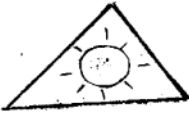
In part (b), student misunderstood the question. Some of them drew small kitchen equipment instead of drawing care labels recommended for drying process. For example, one student drew a *spoon, plate, frying pan and pressure cooker*. Other students drew the care labels which were not asked by the question. For example, one student drew care labels for *do not bleach, wash with hands, do not squeeze and iron with low temperature*. Other students drew irrelevant diagrams which were not clearly interpreted. These students had insufficient knowledge of laundry procedures and international care labels hence scored low marks. Extract 9.2 is a sample of incorrect responses from the script of one of the students.

9. Your mother complained about the new houseboy who had insufficient knowledge of laundering clothes, hence spoiled the quality of clothes. She requested assistance from you to instruct him on the ways of maintaining the quality of clothes during laundering.

(a) Suggest the appropriate preliminary procedures to be done before the washing process. (Provide four procedures).

- (i) soaking this means you remove the water from the materials or garments
- (ii) Reducing - this means that removing any thing from the garment.
- (iii) Replacing or re-stitching this means you place
- (iv) Remove of stains this means that make sure all stains or dirty things are removed.

(b) Draw four care labels recommended for the drying procedure and give the meaning of each.

Drawing	Meaning
(i) 	do not use water for drying material
(ii) 	other clothes can be ironed.
(iii) 	the cloth should not be ironed.
(iv) 	dry into the heavy sunlight

Extract 9.2: A sample of incorrect responses to Question 9

In Extract 9.2, the student provided irrelevant responses to all parts. This indicates that the student had insufficient knowledge about laundry procedures and international care labels for ready-made clothes and articles

2.3 Section C: Essay Question

This section consisted of only one essay question composed from the topic of *Food and Nutrition*.

2.3.1 Question 10: Food and Nutrition

This question measured students' competence of nutrient stability in food preparation and cooking. The question stated that:

Some of nutrients present in food are destroyed due to exposure to certain factors during food preparation and cooking. Analyse four factors and ways of maintaining food nutrients.

A total of 5,302 (100%) students attempted the question. Data shows that 632 (11.92%) students scored from 10.0 to 15.0 marks, 1,182 (22.29%) scored from 4.5 to 9.5 marks and 3,488 (65.79%) scored from 0 to 4.0 marks. This performance is presented in Figure 10.

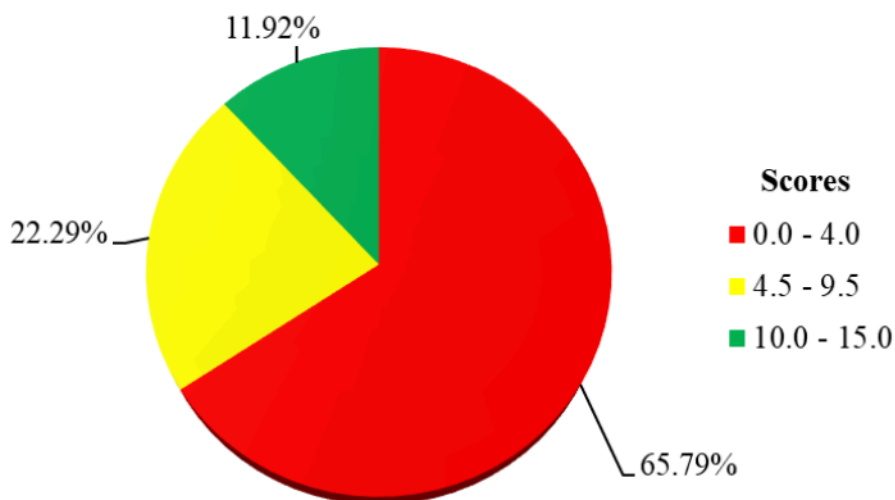


Figure 10: *The Students' Performance on Question 10*

Figure 10, shows the general performance on question 10 was average since 34.92 per cent of the students scored from average or above. This

implies that these students had sufficient knowledge about nutrients stability in food preparation and cooking.

The analysis indicates that most of the students managed to analyze the four factors responsible for the destruction of food nutrients and ways of maintaining them. The students understood that food nutrients can be destroyed during preparation on the exposure to certain factors such as heat or cooking, water, excess water in food during cooking, alkaline or acidic, air and light. For example, one student wrote; *peeling some food the tissue expose to air hence loss of nutrients, cutting vegetable before washing, cooking vegetable to low temperature for a long time, not covering food when cooking, using of bicarbonate of soda and ashes during cooking, soaking chopped food.* These students organized their essays logically by providing clear introduction, points in the main body and good conclusion. Extract 10.1 is a sample of the correct responses from the script of one of the students.

10. Some of the nutrients present in food are destroyed due to exposure to certain factors during food preparation and cooking. Analyse four factors and ways of maintaining food nutrients.

Food nutrients are the chemical compounds which found in food. Food nutrients are like protein, carbohydrate, fat and oil, vitamin and minerals. Food stability is the state which ensure that the food nutrients are not lost from the food.

During food preparation and cooking, some factors can lead to loss of food nutrients from the food. Which are:

Peeling of fruits and potatoes by using the blunt knife. It can cause loss of food nutrients because the inner part of the fruit or potato which contains nutrient will be removed after being peeled.

Soaking of chopped vegetables in water. It can cause loss of food nutrient especially vitamin B and because they are water-soluble vitamins, therefore they can loss in water by leaving the green pigment in water which makes water to be green in colour.

Cooking of vegetables for a long period of time by using low temperature. It will lead to loss of food nutrients through vapour which will be after evaporation which occurs during cooking.

Using of baking soda and ashes during cooking leafy vegetables. It will lead to loss of food nutrient because when baking soda and ashes soften the leafy vegetables, they lead to destroy of nutrients which present in a leafy vegetable.

The following are the ways to avoid loss of food nutrients in food during cooking and food preparation.

..... Using of a sharp knife when peeling fruits and potatoes: This will help to avoid loss of food nutrients through removing the inner parts of the fruits or potatoes, so as to use a sharp knife which will remove the outer layers only.

..... Avoid soaking of chopped vegetables in water: This will help to avoid loss of vitamin B and C which are water-soluble vitamins that can leave in water. So as to wash the leafy vegetables before chopping and to avoid exposing them to sun-light.

..... Cooking of vegetables in a short period at high temperature: It helps to preserve food nutrients from loss through evaporation. Thus, the vegetables should also be covered with a lid during cooking.

..... Avoid using of baking soda and ashes during cooking leafy vegetables: It will preserve food nutrients from loss because using of baking soda and ashes destroy the nutrients of the food.

..... Therefore, in both food preparing, cooking, food processing, food preservation and food storage the ways to ensure food stability should be followed as it can lead to the balance of food nutrients in a meal which helps to get health and the required nutrients for the overall body function.

Extract 10.1: A sample of the correct responses to Question 10

Extract 10.1, shows that the student managed to analyze the factors that destroy nutrients during food preparation and cooking and the ways of maintain them. The student had enough knowledge about the topic tested, hence scored high marks.

Contrary, the analysis reveals that 3488 (65.79%) students scored below 3.0 mark. The analysis of the responses shows that most of the students failed to understand the demand of the question as they provided the factors to consider when planning meals instead of factors that may destroy nutrients during food preparation and cooking, and ways of maintaining food nutrients such as *age, sex, activities* and *physiological factor* while other students wrote the points to consider when choosing method of cooking

food such as *the availability of the food to be cooked, type of food to be cooked, method of cooking food, fuel available, person health condition and the food cooked*. Others wrote the function of food to the body such as *provide energy, provide nutrient to the body, provide body immunity*. These responses show that the students had insufficient knowledge about the stability of food nutrients during food preparation and cooking. Extract 10.2 is a sample of incorrect responses from one of the students.

factors during food preparation and cooking.

Boiling: This is the factor which helps to prepare food through boiling it is used to kill germs which are found in the food and also it is used to make the food safe also to make it soft and easy to eat.

Drying: This also is among the factors which help to dry the food. Example of these foods are vegetables. Also it is used to avoid microorganisms which are found in the food.

Frying: This also is among the factors which is used in preparing food and also cooking food. Also it makes the food easy to eat and also it provides good health.

Refrigeration: This also is among the factors which is used in preparation and cooking food and also preserving food for future use.

The following are the ways of maintaining food-nutrients.

A person should eat enough vegetables in order to have good health and also to avoid disease in the body and also to provide the good health in the people in the society.

People should eat enough fruits in order also to avoid disease in their body and also to gain enough nutrients in their body ~~the~~ system and good health.

People should eat balance diet in order to have good health and also to avoid disease because balance diet it contains all nutrients of food and also a person who will eat balance diet will get good health.

People they should drink enough water in their body. This means that when a person has finish to eat he/she should drink enough water in order to avoid constipation.

Conclusion: Lastly but not leastly I am advising my fellow students we should eat balance diet always in our life process in order to avoid disease

Extract 10.2: A sample of incorrect response to Question 10

In Extract 10.2, the student provided the methods of cooking instead of factors which destroy the food nutrients. He/she also gave the health rules instead of ways of maintaining food nutrients, hence scored low marks.

3.0 ANALYSIS OF STUDENTS' PERFORMANCE PER TOPIC

The analysis of students' performance per topic was done with the aim of identifying topics with weak, average and good performance. In Home Economics assessments, nine topics were assessed. These topics were *Sanitation in The House, An Ideal House, Laundry, Maternal and Child Health, The Kitchen, Food and Nutrition, Basic Sewing Stitches, Introduction to Sewing* and *Good Manners and Good Grooming* were measured.

The analysis of students' performance in each topic indicates that the students' performance was good on topics tested on. Multiple Choice Items question consists of topics of *Good Manners and Good Grooming, Food and Nutrition, Introduction to Sewing, An Ideal House, Cooking Food, The Kitchen, Sanitation in The Home, Laundry, Basic Sewing Stitches* and *Maternal and Child Health* (92.63%) and *Sanitation in the Home* (78.95%). This was contributed by adequate knowledge on the assessed concepts and the subject matter among the students and the ability to understand the need of the question.

The averagely performed topics were *An Ideal House* (64.20%), *Laundry* (58.34%), *Maternal and Child Health* (51.34%), *The Kitchen* (46.11%) and *Food and Nutrition* (34.21%). The average performance was contributed by inability to provide all the required points as demanded by the question or providing insufficient explanations of the correct points.

Further analysis shows that students had weak performance on the topics of *Basic Sewing Stitches* (21.80%) and *Introduction to Sewing* (21.22%). The weak performance on these topics was due to lack of knowledge about the topics tested i.e. Textiles and Garment Construction topics. Other factor was poor command of English language which hindered students' ability to clarify concepts in various questions.

4.0 CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The analysis of the responses as well as the topics covered indicated that the general performance of the students in Home Economics in FTNA 2023 was average.

The analysis further revealed that the good performance in some topics was contributed by the students' adequate knowledge on the tested concepts. It was also attributed to students to correctly understanding of the requirement of the questions.

Moreover, the poor performance was due to inadequate knowledge on the topics tested, failure to interpret the need of the question, and poor command of the English language which hindered students' ability to clarify concepts in various questions.

4.2 Recommendations

In order to improve the performance of the Home Economics subject in the future, it is recommended that:

- (a) Teachers should ensure that all the topics with the concepts of Textiles and Garment Construction are taught thoroughly using appropriate teaching aid to enhance understanding.
- (b) Teachers should use variety of student-centred learning approaches as they enable continuous monitoring of student' needs.
- (c) Students should be provided with sufficient homework, exercises and tests to enable them revise all the topics stipulated in the syllabus.
- (d) Students should be provided with sufficient teaching and learning materials for practical lessons.
- (e) Students should be encouraged to use English language in the processes of learning in order to improve English language proficiency.

Summary of Students' Performance per Topic

S/N	Topic/Sub Topic	Question Number	The Percentage of Students who Scored 30% or Above	The Percentage of Students who Scored an Average of 30% or Above	Remarks
1.	Good Manners and Good Grooming, Food and Nutrition, Basic Sewing Stitches, An Ideal House, Cooking Food, The Kitchen, Sanitation in the House, Laundry and Maternal and Child Health. (Multiple Choice items)	1	92.63	92.63	Good
2.	Sanitation in the Home	6	78.95	78.95	Good
3.	An Ideal House (Matching Items)	2	64.20	64.20	Average
4.	Laundry	9	58.34	58.34	Average
5.	Maternal and Child Health	5	51.34	51.34	Average
6.	The Kitchen	3	14.65	46.10	Average
7.	The Kitchen	4	77.54		
8.	Food and Nutrition	10	34.21	34.21	Average
9.	Basic Sewing Stitches	7	21.80	21.80	Weak
10.	Introduction to Sewing	8	21.22	21.22	Weak

