THE NATIONAL EXAMINATIONS COUNCIL OF TANZANIA


CANDIDATES' ITEM RESPONSE ANALYSIS REPORT FOR DIPLOMA IN SECONDARY EDUCATION EXAMINATION (DSEE) 2018

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## 753 HOME ECONOMICS

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## List of Abreviations

CIRA - Candidates' Items Response Analysis
DSEE - Diploma in Secondary Education Examination
NECTA - National Examinations Council of Tanzania
TIE - Tanzania Institute of Education

## FOREWORD

The National Examinations Council of Tanzania (NECTA) is pleased to issue the Candidates' Items Response Analysis (CIRA) report for the Diploma in Secondary Education Examination (DSEE), 2018 in Home Economics subject. The report has been prepared to provide feedback to tutors, student teachers, parents, policy makers and the public in general on the performance of the candidates in the subject and to identify proper measures to be taken in order to improve the candidates' performance in future examinations which administered by the Council.

The analysis presented is intended to contribute towards the understanding some of the reasons for the performance of the candidates in Home Economics subject. It gives emphasis mainly on the analysis of students' performance in every question, thus the sample responses from students' scripts and the statistical data are used for wide elaboration. Furthermore, the report focuses on identifying the strengths and weaknesses of the candidates' responses in different examined topics. The report also highlights some of the factors which made the candidates fail to score high marks in the questions. The factors observed including, insufficient knowledge of basic concepts of Home Economics and teaching methods and techniques, and failure to identify the demand of the questions that led them to provide incorrect and incomplete responses, and skipping some of the questions.

The National Examinations Council of Tanzania will appreciate to receive constructive suggestions, advice and recommendations from the tutors, student teachers and other education stakeholders which will be valuable in enriching the analysis reports in future. Furthermore, NECTA would like to express its sincere gratitude to everyone who participated in the preparation of this report up to the completion stage.


Dr. Charles E. Msonde

## EXECUTIVE SECRETARY

### 1.0 INTRODUCTION

This report analyses the candidates' performance in Home Economics Theory Paper of Diploma in Secondary Education Examination (DSEE) conducted in May, 2018. The examination measured competences according to the 1999 Home Economics Teaching Methods syllabus.

The paper comprised of sixteen (16) questions which were distributed in three sections, namely A, B and C. Section A was compulsory and consisted of ten (10) short answer questions which carried 4 marks each. Sections B and C each consisted of three (3) essay questions and each question carried 15 marks. The candidates were required to answer any two questions from each of these sections.

According to the DSEE 2018 results, a total of 5 ( $100 \%$ ) candidates sat for this paper of which all $5(100 \%)$ candidates passed the examination with the following grades: $\mathrm{A}=0(0 \%), \mathrm{B}=1(20 \%), \mathrm{C}=4(80 \%)$ and $\mathrm{D}=0$ $(0 \%)$. On the other hand, none of the candidates failed. This implies that the overall candidates' performance was good.

The analysis of candidates' performance in each question is regarded as good if the scores range from 70 to 100 percent, average if the scores range from 40 to 69 percent and weak if the scores range from 0 to 39 percent. These three categories of performance are indicated by using colours that is green, yellow and red colours which denote the good, average and weak performance, respectively.

The report also presents the requirement of each question, the percentage of the candidates who attempted the question with their scores and the possible reasons for such performance. Some extracts obtained from the candidates' examination scripts and graphs that indicate distribution of candidates' scores are inserted in this report to illustrate the stated information.

It is expected that, this report will be useful to tutors, student teachers and other education stakeholders to enable them to locate areas where the candidates face learning difficulties so as to make improvement in teaching and learning process.

### 2.0 ANALYSIS OF THE CANDIDATES' PERFORMANCE IN EACH QUESTION

### 2.1 Section A: Short Answer Questions

This section comprised of 10 compulsory short answer questions from various topics, namely Sewing Machine; Dressmaking Processes; Rationale for Lesson Assessment, Evaluation and Testing; Instruments/Devices for Assessing, Evaluating and Testing in Home Economics; Teaching Materials; The Family; Planning Balanced Meal; Food and Nutrition; Malnutrition. In this section each question carries 4 marks, making a total of 40 marks. The performance in a particular question is regarded as weak, average or good if the candidates' scores are in ranges of $0-1.5,2-2.5$ and $3-4$ marks respectively as illustrated in Table 1.

Table 1 Shows the Score Ranges with Performance Description

| Score Ranges | Description |
| :---: | :---: |
| $0-1.5$ | Weak |
| $2-2.5$ | Average |
| $3-4$ | Good |

### 2.1.1 Question 1: Lesson Assessment, Evaluation and Testing

This question was constructed from the topic of Lesson Assessment, Evaluation and Testing. The candidates were required to (a) give the meaning of educational evaluation and (b) explain briefly three importance of educational evaluation in Home Economics.

The question was attempted by five candidates (100\%) who sat for this paper. The general performance of this question was good since 100 percent of the candidates who sat for this paper scored average and above, that is 2 marks and above. Their scores were as follows: four candidates $(80 \%)$ scored from 3 to 4 marks and one candidate ( $20 \%$ ) scored from 2 to 2.5 marks. However, none of the candidates scored below 2 marks. Figure 1 gives a summary of this performance.


Figure 1: Candidates' Performance in Question 1.
The analysis of candidates' responses shows that the candidates who performed well had adequate knowledge of the educational evaluation concept. In part (a) some of the candidates were able to give the meaning of the term educational evaluation. These candidates understood that educational evaluation is the process of making value judgement in order to reach meaningful decisions about the education programme. In part (b), the candidates were able to explain briefly the importance of educational evaluation. Despite the fact that the performance of this question is good, some of the candidates failed to explain briefly one or two importance of educational evaluation, hence failed to score all 4 marks. For example, some of them responded that, educational evaluation helps in improvement of teaching and learning resources/process. This shows that the candidates did not understand that educational evaluation cannot improve teaching and learning process but it helps to identify areas of improvement in education process or programme. The candidates also showed poor understanding of English Language. Extract 1 is a sample answer from a script of a candidate who performed well.

## Extract 1



Extract 1 indicates the response from the candidate who managed to give the meaning of educational evaluation and explained briefly the importance of educational evaluation.

### 2.1.2 Question 2: Dressmaking Processes

This question was constructed from the topic of Dressmaking Processes under the sub topic, namely Disposal of Fullness. The candidates were required to (a) state two general rules for making darts and (b) name four positions where darts can be sewn.

The question was attempted by five candidates (100\%) who sat for this paper. The data analysis indicates that the candidates' performance on this question was poor, since all candidates scored from 0 to 1.5 marks. Among them, 80 percent scored 0 and 20 percent scored 0.5 marks. Figure 2 gives a summary of this performance.


Figure 2: Candidates' Performance in Question 2.

The analysis of candidates' responses shows that, the candidates who performed poorly failed to state two rules for making darts in part (a). For example, some of the candidates gave rules for making seams instead of darts, others provided irrelevant response. In part (b) the candidates failed to name four positions where darts can be sewn. Some of them named parts of the garment such as front part and back part instead of positions such as at the shoulder, underarm, elbow and waist. Others misunderstood the question as a result they provided irrelevant response. This indicates that candidates had inadequate knowledge of darts. Extract 2 is a sample answer from a script of a candidate who performed poorly.

## Extract 2



| 2 (d) Four Parition where darts can be sewn |  |
| :--- | :--- |
|  | (i) In She front paet of the bloces. |
|  | (ui) In the back paet of the blocese or gown. |
|  | (ui) In the pront part of the traeser. |
|  | (w) In the back paet of the trauser. |

Extract 2 shows the responses from the candidate who provided irrelevant response in part (a). Moreover, in part (b) the candidate wrote the parts of the garment instead of positions where darts can be sewn, hence performed poorly.

### 2.1.3 Question 3: Sewing Machine

This question was constructed from the topic of Sewing Machine. The candidates were required to (a) name two types of sewing machine and (b) give the function of each of the following parts of the sewing machine: (i) Stop motion screw, (ii) Tension control and (iii) Presser bar.

The question was attempted by five candidates (100\%) who sat for this paper. The data analysis shows that the performance of this question was average, since 40 percent of the candidates performed averagely. Furthermore, the analysis indicates that, 60 percent of the candidates scored from 0 to 1.5 marks and none of the candidates scored above 2.5 marks. Figure 3 illustrates a summary of this performance.


Figure 3: Candidates' Performance in Question 3.

The analysis of candidates' response indicates that, two candidates ( $40 \%$ ) who performed averagely, managed to name two types of sewing machine that are, treadle, electric or hand sewing machine in part (a). However, in part (b) the candidates were able to give function of some parts of the sewing machine and failed the other parts because they mixed up the functions. For example, one candidate wrote the function of a balance wheel instead of that of stop motion screw. The candidate seemed to mix up the function of stop motion screw with that of the balance wheel because the parts are closely located on the sewing machine. Moreover, the candidates wrote the function of a stitch regulator instead of a tension control, and the function of a presser foot instead of a pressure bar. Hence, they failed to score above average. Extract 3.1 illustrate a sample answer from a script of a candidate who performed averagely.

## Extract 3.1



Extract 3.1 shows the response from the candidate who managed to answer part (a). However in part (b) some of the functions were incorrect hence failed to score all 4 marks, hence performed averagely

The analysis further indicates that, three candidates (60\%) who performed poorly managed to name two types of sewing machines in part (a). But in part (b), they failed to explain the functions of the sewing machine parts: stop motion screw, tension control and presser bar. This implies that the candidates had inadequate knowledge of the function of the parts of the sewing machine. Extract 3.2 is a sample answer from a script of a candidate who performed poorly.

## Extract 3.2

| -3 | (a) Tupes of secoing Machine: |
| :---: | :---: |
|  | (i) Hard eperatad machine |
|  | (i1) Ezlecfrcap sewing Mackeñ |
|  | (b) (cencfoin efttre fallowng |
|  | (1) Sbop nzotion serew- Inzis llsed lz |
|  | Feoulate the speed of stitchos |
|  | (ii) Teusion, costrol- Ihis lesed to pres |
|  | Matercap/cloth witte presser ber. |
|  | (iii) Presser bar- L Lesed to poess the |
|  | materiaf en the maclune/sewoing |
|  | macluñ |
|  |  |

Extract 3.2 shows the response from a candidate who managed to name two types of sewing machine in part (a) but failed to explain the functions of sewing machine parts, hence performed poorly.

### 2.1.4 Question 4: Lesson Assessment, Evaluation and Testing

This question was constructed from the topic of Lesson Assessment, Evaluation and Testing under the sub topic, namely Instruments for Assessing. The candidates were required to (a) differentiate measurement from test as used in Home Economics and (b) explain briefly three things that can ensure high validity of the Home Economics test.

The question was attempted by five candidates (100\%) who sat for the examination. The data analysis shows that the performance of this question was poor since 80 percent of all candidates who sat for this paper performed below average that is, from 0 to 1.5 out of 4 allotted marks. Moreover, 20 percent of the candidates scored from 2 to 2.5 marks and none of the candidates scored above 2.5 marks. Figure 4 shows a summary of this performance.


Figure 4: Candidates' Performance in Question 4.

The candidates' response analysis indicates that, four candidates ( $80 \%$ ) who performed poorly failed to differentiate measurement from test as used in Home Economics. The candidates were required to ascertain what makes measurement and test different. Instead they gave differences through definitions which were not correct. In part (b), the candidates failed to explain briefly the three important things that can ensure high validity of the home economics test. Some of them mixed up the factors that affect validity with that affecting reliability, and others wrote the ways of analysing test items. Extract 4.1 is a sample answer from a script of a candidate who performed poorly.

## Extract 4.1



## Extract 4.1 continues.



Extract 4.1 shows the answer from the candidate who failed to differentiate measurement and test in part (a). Moreover in part (b), the candidate provided some of the ways of analysing items such as difficulty level and item discrimination.

The analysis further indicates that, one candidate (20\%) performed averagely. In part (a) the candidate was able to differentiate measurement from test as used in Home Economics. However, in part (b), the candidates managed to explain briefly one thing that can ensure high validity of the Home economics test instead of three things. Extract 4.2 illustrates a sample response from a script of a candidate with average performance.

## Extract 4.2



Extract 4.2 continues........

| (b) |
| :--- |
| 1) The content to be measored should be covered to all |
| stodents |
| iii) The purpese of the test. |
| iii) The length of the test to be used to ossecs the students |
| (i) |

Extract 4.2 shows the answer from the candidate who managed to differentiate measurement form test but the candidate provided incorrect response in part (b) (i) and (ii), hence performed averagely.

### 2.1.5 Question 5: Planning Balanced Meal

The question was constructed from the topic of Planning Balance Meal. The candidates were required to (a) give the meaning of a breast milk substitute and (b) outline three important things to observe when feeding babies the infant formula.

The question was attempted by five candidates (100\%) who sat for the examination. The data analysis shows that the general performance of this question was average since 60 percent of the candidates who attempted the question scored from 2 to 2.5 . Moreover, 40 percent scored from 0 to 1.5 marks out of 4 allotted marks as illustrated in Figure 5.


Figure 5: Candidates' Performance in Question 5.

The candidates' response analysis indicates that, in part (a), three candidates $(60 \%)$ who performed averagely were able to give the meaning of a breast milk substitute. In part (b) some of them managed to provide one important thing instead of three important things to observe when feeding babies the infants formula, hence failed to score all 4 marks. Failure of providing the correct response was due to repetition of some correct points, partial responses and inadequate knowledge of infants' formula that led them to provide incorrect response. Extract 5 is a sample answer from a script of a candidate who performed averagely.

## Extract: 5

|  |  |
| :---: | :---: |
| 5 | a) Breast milk substitute repes to the use of allernatinative |
|  | milk lo jeed a young baby instecd of mothes milk. This bre |
|  | ost milk substitute can be processed milk that is stered on the |
|  | canns. The parpose of breast milk sibstitule is to provicle ta |
|  | young buby ail notrients when tee tome her mother are not presedt |
|  | in the home or she is is ta job area. |
|  |  |
|  | b), the age of the impant byese you start to yeed tee impont |
|  | pormula milk |
|  | 11) The instraction from tae health workes as well as |
|  | instuation from the cann-milk on how to use and dilute |
|  | if. |
| 5 |  |
|  | iii) The time interval when you houe finish to yeed the baby |
|  | in urdes to coord malnutrition diserder that con happen |
|  | to la laby. |
|  |  |

Extract 5 illustrates the response from the candidate who managed to give the meaning of breast milk substitute in part (a). However, in part (b) some of the points were incorrect, such as (i) and (iii).

On the other hand, the analysis indicates that two candidates (40\%) who performed poorly understood the meaning of a milk substitute but some of them were not aware that infant formula is one of the
milk substitute used for feeding babies. Hence, they failed to outline the important things to observe when feeding babies the infant formula. Some of the incorrect responses provided were; food available for feeding, balanced meal, like and dislike of the child or baby and nutritive value of the infants formula. The candidates demonstrated inadequate knowledge of infant formula as a milk substitute for babies.

### 2.1.6 Question 6: Teaching Materials

The question was constructed form the topic of Teaching Materials. In this question the candidates were required to outline four importance of using teaching and learning materials in teaching Home Economics subject.

The question was attempted by five candidates ( $100 \%$ ) who sat for this paper. Their scores were as follows: 40 percent scored from 2 to 2.5 marks and 60 percent scored from 3 to 4 marks. None of the candidates scored below 2 marks. The data analysis shows that the general performance of this question was good since 100 percent of the candidates performed averagely and above as illustrated in Figure 6.


Figure 6: Candidates' Performance in Question 6.
The analysis of candidates' response shows that, the candidates who performed well, managed to outline either two or three importance of
using teaching and learning materials in teaching Home Economics, thus failed to score all 4 marks. One of the reasons for failure was inadequate knowledge of the importance of using teaching aids. Some of the incorrect responses were; it helps to solve language barriers which exist during teaching, it helps teachers to cover the specific objectives and it helps teachers to prepare questions to be asked during the lesson. This indicates that the candidates had insufficient knowledge of the importance of using teaching aids. Other reasons were partial responses and repetition of the correct points. Extracts 6 is a sample response from a script of a candidate who performed well.

## Extracts 6

| 6 | (i) Eshance metivation to the learner durinis teaching and learning. |
| :---: | :---: |
|  | (ii) Enhance active participation iff during |
|  | (iii) Itessom to rise the interests of the tearner |
|  |  |
|  | $\begin{aligned} & \text { Enbance altention of } \\ & \text { teaching and learning. } \end{aligned}$ |

Extract 6 illustrates the response from the candidate who managed to outline correctly three importance of using teaching and learning material, hence failed to score all 4 marks because (iv) "enhance attention...." and (iii) "enhance interest......." have the same meaning.

### 2.1.7 Question 7: The Family

This question was constructed from The Family topic. The candidates were required to (a) define the term "family" and (b) write down three things to observe in order to enhance family relationship.

The question was attempted by five candidates ( $100 \%$ ) who sat for the examination. Their scores were as follows: 60 percent scored from 3 to 4 marks, 20 percent scored from 2 to 2.5 marks and 20 percent scored from 0 to 1.5 marks. The analysis shows that the general performance of this question was good since 80 percent scored above average. Figure 7 illustrates a summary of this performance.


Figure 7: Candidates' Performance in Question 7.

The analysis of candidates' responses shows that, in part (a) four candidates $(80 \%)$ who performed well managed to give the meaning of the family. In part (b) the candidates were able to write things to observe in order to enhance family relationship such as unity, cooperation, peace, security and love. Extract 7:1 is a sample answer from a script of a candidate with good performance.

## Extract 7.1

7. 

Extract 7.1 shows the response from the candidate who performed well. The candidate managed to define the term family and outline the things to observe in order to enhance family relationship.

Furthermore, the analysis indicates that one candidate (20\%) with poor performance managed to define the term family partially in part
(a). In part (b) the candidate mixed up the things that enhance family relationship with the things that may affect family economy. This shows that the candidate had insufficient knowledge of ways of enhancing family relationship. Extract 7.2 is a sample answer from a script of a candidate who performed poorly.

## Extract 7.2



Extract 7.2 shows the response from the candidate who provided partial definition of a family in part (a) and irrelevant answers in part (b) (ii) and (iii). The language used was also poor.

### 2.1.8 Question 8: Food and Nutrition

This question was constructed from the topic of Food and Nutrition under the sub topic namely Food Nutrients. The candidates were required to outline four functions of vitamin C.

This question was attempted by five candidates (100\%) who sat for this paper. Their scores were as follows: 40 percent scored from 3 to 4 marks, 40 percent of them scored from 2 to 2.5 marks and 20 percent scored from 0 to 1.5 marks. None of the candidates scored all 4 marks. The analysis shows that the general performance of this question was good since 80 percent scored average and above. Figure 8 shows a summary of this performance.


Figure 8: Candidates' Performance in Question 8.

The candidates' responses analysis shows that, four candidates ( $80 \%$ ) who performed well in this question had adequate knowledge on the functions of vitamin C. Among them, three candidates were able to outline two to three functions of vitamins C instead of four functions and one candidate mixed up the functions of vitamin C with the functions of vitamin D, hence failed to score all 4 marks. Some of the incorrect responses provided include the following:
....it helps in formation of digestive vessels. This candidate was not aware that vitamin C helps to make connective tissue which binds the body cells together.
.....it helps to regulate the female menstruation cycle. The candidate did not understand that vitamin C has no relation with female menstruation cycle but enhance iron absorption, an element that is essential for blood production.

Extract 8:1 is a sample answer from a script of a candidate who performed well.

## Extract 8:1

| 8 | Tuncticn e Vefomin C $C_{1}$ is: |
| :---: | :---: |
|  |  |
|  | Vessle |
|  | IIr te assijt un absuption of sulfur |
|  | anch phosphores |
|  | III t-act of ant-scuvy |
|  |  |
|  | calcium in ter bocly. |

Extract 8.1 shows the response from the candidate who performed well. The candidate managed to outline correctly some of the functions of vitamin C but he/she did not understand that the absorption of phosphorus is enhanced by vitamin D and not vitamin C.

The analysis further indicates that, one candidate (20\%) who performed poorly, failed to outline correctly the functions of vitamin C. The candidate had inadequate knowledge of vitamin C , therefore provided irrelevant response. Extract 8:2 illustrate a sample answer of a candidate who performed poorly.

## Extract 8:2

| 8 | Function of vitamin C. |
| :---: | :---: |
|  | i) used to provide / Increase appetite |
|  | of eatimg. |
|  | ii) Proride and aid dagestrón |
|  | food becaulse contain fiber. |
|  | iii) Lt helps in Absorpbon of Cirsteste |
|  | nof in the bocts due to presence |
|  | of soluble fiber. |
|  | (iv) et help Lesed to Provent constipa |
|  | hon. |
|  |  |

Extract $8: 2$ is the answer from the candidate who provided the functions of roughage instead of the functions of vitamin $C$, hence performed poorly.

### 2.1.9 Question 9: Planning Balanced Meal

This question was constructed from the Meal Balanced Planning topic. The candidates were required to explain three points to consider when planning meals for the invalid.

This question was attempted by five candidates ( $100 \%$ ) who sat for this paper. The scores were as follows: 20 percent scored from 3 to 4 marks, 60 percent scored from 2 to 2.5 marks and 20 percent scored from 0 to 1.5 marks. The analysis shows that the general performance of this question was good since 80 percent scored average and above. Figure 9 shows a summary of this performance.


Figure 9: Candidates' Performance in Question 9.

The analysis of candidates' responses shows that, four candidates ( $80 \%$ ) who performed well were able to provide correctly the points to consider when planning meals for the invalid. Some of the correct responses were; the food should be easy to eat and digest, the food should tempt the patients' appetite, the food must contain all nutrients so as to be balanced and consider like and dislikes of the patient. Extract 9:1 shows a sample response from a script of a good performed candidate.

## Extract 9:1

| of pointe forlonsider when planking meals |
| :--- |
| for the Invalid 1 i: |
| 1. Consider nutribive value of toe |

Extract 9:1 continues.......


Extract 9.1 shows the response from the candidate who performed well. The candidate managed to explain briefly three points to consider when planning meals for the invalid.

Furthermore, the analysis indicates that one candidate (20\%) with poor performance mixed up the points to consider when planning meals for the invalid with the factors to consider in menu planning, such as availability of foods, amount of time available and amount of money available. The candidate did not understand that invalids are persons who need to be cared for because they have illness or weakness, therefore the meal should be planned with consideration to their illness. Extract 9:2 shows a sample response from a script of a candidate who performed poorly.

## Extract 9:2



Extract 9:2 is the answer from the candidate who wrote incorrect factors to consider when planning menu.

### 2.1.10 Question 10: Malnutrition

This question was constructed from the topic of Malnutrition. The candidates were required to (a) give the meaning of the concept of undernutrition, and (b) describe two causes of rickets.

This question was attempted by five candidates ( $100 \%$ ) who sat for this paper. The data analysis shows that the general performance of this question was good since 80 percent scored 2 marks and above. The candidates' scores were as follows: 40 percent scored from 3 to 4 marks, 40 percent scored from 2 to 2.5 marks and 20 percent scored from 0 to 1.5 marks out of 4 allotted marks. None of the candidates scored zero. Figure 10 shows a summary of this performance.


Figure 10: Candidates' Performance in Question 10.

The analysis of candidates' responses shows that, four candidates ( $80 \%$ ) who performed well had adequate knowledge of undernutrition. The candidates managed to give the meaning of undernutrition in part (a), and in part (b) the candidates were able to describe two causes of rickets, which are lack of calcium and vitamin $D$. These candidates understood that vitamin D enhance the absorption of calcium and phosphorus from the gastrointestinal tract, thus a deficiency of vitamin D makes it difficult to maintain proper calcium and phosphorus levels in bones and cause rickets. Extract 10 shows a sample response from a candidate who performance well.

## Extract 10

| 10. | Concepf of unclunutrition Cenderntion is fature to eat wed |
| :---: | :---: |
|  | balance deet which lead the disease such |
|  | as Marrasmus, kwashiorkoor and rickefs. |
|  | Thes mortly occur in developing cocuty |
|  | where Heere is a paverty. |
|  |  |
|  | ab) Gauses of rickets |
|  | (5) talk of vitamin $\triangle$ in the body |
|  | which help wi the formatoms of |
|  | Strong bone 88 teeth. |
|  | dilf Lame of cafcimus and plospornes |
|  | winerals in the body. which help |
|  | in strong formateon of bone. This mmeral |
|  | cau be absobcled in the bocky under the |
|  | ingluence of vifaumin $D$. |

Extract 10 shows the response from the candidate who managed to give correct meaning of undernutrition and describe two causes of rickets, hence performed well.

Despite the fact that the question was performed well, one candidate ( $20 \%$ ) provided incomplete meaning of a term undernutrition in part (a). Moreover, in part (b) the candidate indicated insufficient knowledge of rickets as a result he/she mixed up the meaning of term obesity and causes of rickets, hence scored low marks. For example, the candidate wrote, "Obesity is the effect of overweight lead to bend of the borne especially to the child." This candidate did not understand that vitamin D enhance absorption of calcium and promote bone growth. Thus the deficiency of vitamin $D$ result in soft bones in children that cause knocked or bowed legs, the disease known as rickets.

### 2.2 Section B: Essay Questions

This section consisted of three (3) optional essay questions from the topic of Dressmaking processes, Food Preservation, The Family, Adolescent and Early Marriage. The candidates were required to answer only two questions of which each question carried 15 marks, making a total of 30 marks. The performance in a particular question is regarded as weak, average or good if the candidates' scores are in ranges of $0-5.5,6-10$ and $10.5-15$ marks respectively as illustrated in Table 2.

Table 2 Shows the Score Ranges with Performance Description

| Score Ranges | Description |
| :---: | :---: |
| $0-5.5$ | Weak |
| $6-10$ | Average |
| $10.5-15$ | Good |

### 2.2.1 Question 11: Dressmaking Processes

This question was constructed from the topic of Dressmaking Processes under the sub topic, namely Disposal of Fullness. The question required the candidates to describe six methods of arranging fullness commonly used on garments.

The question was attempted by only one candidate ( $20 \%$ ) out of five candidates who sat for this paper. The data analysis shows that the general performance of this question was poor since the candidate scored below average that is 4.5 out of 15 allotted marks. Figure 11 demonstrates a summary of this performance.


Figure 11: Candidates' Performance in Question 11.

The analysis of candidates' responses indicates that the candidate who attempted this question had insufficient knowledge of different methods of arranging fullness. This candidate managed to describe partially three methods of arranging fullness commonly used on garments out of six methods. The other responses provided were the
methods of repairing clothes, ie. darning, method of neatening raw edges, i.e. facing, and fastening. Furthermore, the analysis reveals that four candidates ( $80 \%$ ) skipped this question perhaps because they had inadequate knowledge of dressmaking concepts hence decided to opt for the other questions under the food and nutrition and home management concepts. Extract 11 is a sample answer from the script of a candidate who performed poorly.

## Extract 11



Extract 11 shows the answer from the candidate who attempted this question. The candidate performed poorly since he/she mixed up the methods of arranging fullness with other dressmaking processes such as fastenings, mending and edge finishing.

### 2.2.2 Question 12: Food Preservation

This question was constructed from Food Preservation topic. The candidates were required to explain in detail six causes of food spoilage.

The question was attempted by five candidates (100\%) who sat for this paper. The data analysis shows that, the candidates' performance was average since 60 percent of the candidates who attempted the question scored averagely. Their scores distributed as follows: 40 percent of the candidates scored from 0 to 5.5 marks, 60 percent scored from 6 to 10 marks and none of the candidates scored from 10.5 to 15 marks. Figure 12 shows a summary of this performance.


Figure 12: Candidates' Performance in Question 12.

The candidates' response analysis indicates that three candidates ( $60 \%$ ) who performed average were able to explain in detail the causes of food spoilage. However, they failed to perform above average score since some of them provided partial explanation and others provided few causes. The correct causes for food spoilage are moulds, bacteria, insects, yeast, air, chemical changes and action of enzymes. Extract 12:1 illustrates a sample answer from a candidate who performed well.

## Extract 12:1



## Extract 12:1 continues......



Extract 12.1 shows the response from the candidate with the average performance. The candidate managed to explain five causes of food spoilage instead of six. Furthermore, the explanation provided was also either incomplete or incorrect.

On the other hand, the candidates who performed poorly mixed up the two concepts, food spoilage with food contaminations, thus whey explained on the cause of food contamination such as poor attention when handling food, careless storage of food, dirty serving utensils, prolonged storage and poor kitchen hygiene instead of the causes of food spoilage. Extract 12:2 shows a sample answer from a script of a candidates who performed poorly.

## Extract 12:2



## Extract 12:2 continues........

|  | Improper storage of food in a required |
| :---: | :---: |
|  | place tor examuple whun rou keop a foed |
|  | which contain high proters if lead to ke |
|  | spoid sonie the enzymie activites falce place |
|  | aud the result if sporled for exauple meat |
|  | and festh. |
|  | Reheating or lyt overs when rehead |
|  | He lept over two in times pi become |
|  | detornorate siosce it alfivate be pactena |
|  | present is thol food |
| 12 | Poor hygiene duermig preparation offood |
|  | when prepaing food there weest be kugient |
|  | Juch as to coute all cuts aud wocerds, |
|  | to kover in a cloan place and deas utentits |
|  | inorder to avord upoilocge. |
|  |  |
|  | Expire of tood especically convenience |
|  | food, when buy the food whele is |
|  | expiréd there uust be a spoiled sonu |
|  | expere date are already occur. |
|  |  |
|  | Therefore inorder to prevect toud |
|  | spoidage the followirty must be considered. |
|  | Proper uforage of focel, dowot reliect |
|  | Focet nore lleau on bques, aud prepare |
|  | Food to's a cleau kitclue and convider |
|  | hygenti pratiofe. |
|  |  |

Extract 12:2 shows the answers from the candidate who provided causes of food contamination instead of causes of food spoilage.

### 2.2.3 Question 13: Adolescent and Early Marriage

This question was constructed from the topic, namely Adolescent and Early Marriage. The question required the candidates to explain four factors that contributed to teenage pregnancies and give four problems which an adolescent boy face.

This question was attempted by four ( $80 \%$ ) out of five candidates who sat for this paper. The data analysis shows that the candidates' performance was average because 75 percent of the candidates who attempted the question performed averagely that is, from 6 to 10
marks. Moreover, 25 percent scored from 0 to 5.5 marks and none of them scored above 10 marks as illustrated in Figure 13.


Figure 13: Candidates' Performance in Question 13.

The analysis of candidates' responses indicates that the candidates with average performance were able to explain some of the factors that contribute to teenage pregnancies in part (a). Furthermore, in part (b) the candidates provided two to three problems which adolescent boy faced out of four required by the question. Failure to score good marks ( 10.5 - 15 marks) was due to the partial, incorrect and repeated responses. Extract 13.1 illustrate a sample answer from a script of a candidate who performed averagely.

Extract 13.1
13. To explain four factors that Coutrifont to the teenage pregavaes and give thur probe mblem that may be faced by adolesent.

Adolescent the transition oe between childhood and adult hood in which a young develops reeondany Character such as broaden voile for boy, peered vile For women imensinuaf. Dumping adolescent boy and gits are faced to money challenges

The fallowing are four (4) Factors that Contribute to teenage pregnancies.

Effect and influence of peer groups: During teenage there is high influence that stimulate aud conf convise lo men to engage in relation/sexual relation incwich may get Cluplanned pregnancies. Example Most of nan they convice lumen to engage in sexual relation that may Lead to pregrauce.
sexual desire: During adolesent and teenage there is high acumulation of homone that fluence and connie an Individual to engage in sexual relation The's ave body mechanism that intheen ce au Individual bo engage in sexeral reline ave this may Leach to teenage pregnancies temple are follicle stimulating homone (FIAt) and Oestrogen lumones ( $\sigma H$ ).
poverty and economic problems: thus factor may encourage au Individual to engage in sexual relation so that Can get a money that could helps to betty

Extract 13.1 continues.....
 cyluhen ave in the relation.

Lack of education about family planning, During teenage most oflomen ley donst know why of preventing pregna nt the the uses of condom, hormones Her day during mestrual cycle anal the May practice sexieal intercourse in the day that can get pregnant (vouktion day)

The fallowing ave four (4) Po belem which adolescent boy face.

Mis-unclerstanding aud family conflict: Adolescent boy faced by the challenge of family conflict because he did not late to follow the parent's Instruction aud ettimed value aud norm of the society. Example. Aboy may wait to engage in sexier melt ion While their parent didnot want their child to engage in that bad behouloin. Fail to control their stress end emotion; Adolescent they are mod diffic celt to control their emotion and this May lead to engage in bad actzurties such as drug abuse, Thefts ane sexual. Fail to make acurate aud ration judgement about their life in geneal. Most of addescent boy fail to male decision an how to take Judgement on which is good or bad.
poverly aud economic problem. Adolescent boy they wait to haw le

## Extract 13.1 continues.....

|  | good end plenty things such as gord car, |
| :---: | :---: |
|  | houses, good clothes and to have agood |
|  | Hetatron with abeutipul girl \|partner but |
|  | they don't have make plan on how |
| 13 | to acluive goal ratter Hau waut to |
|  | be cleau qued fmart all the time. |
|  | To Generally teenage pregnancios and |
|  | problem face adolesent boy may be ore |
|  | rcome through keep and proride high actio |
|  | Lies to them, give them advice about |
|  | Sexud) education about famely plani |
|  | ng and emphasize them to do txerise |
|  | regularty. |

Extract 13.1 shows the response from the candidate who managed to explain the factors that contributing to teenage pregnancies and give four problems which adolescent boy faced. But some of them were incorrect and others were repeated, hence failed to score above average.

The analysis further indicates that, one candidate (25\%) who performed poorly had inadequate knowledge of the concepts of teenage pregnancies and adolescent problems. The candidate misunderstood the question, thus provided health rules for ensuring good health to expectant mothers, instead of the factors that contributed to teenage pregnancies and give four problems which an adolescent boy face. Extract 13.2 is a sample response from a script of a candidate who performed poorly.

Extract 13.2


Extract 13.2 shows the response from the candidate who misunderstood the question and provided irrelevant response.
2.3 Section C: Essay Questions

This section consisted of three optional essay questions from two topics, namely Teaching and Learning Strategies and Techniques; and Lesson Assessment, Evaluation and Testing. The candidates were required to answer
only two questions in which each question carried 15 marks, making a total of 30 marks. The performance in each particular question is regarded as weak, average or good if the candidates' scores are in the ranges of $0-5.5$, $6-10$ and $10.5-15$ marks respectively as shown in Table 3.

Table 3 Shows the Score Ranges with Performance Description

| Score Ranges | Description |
| :---: | :---: |
| $0-5.5$ | Weak |
| $6-10$ | Average |
| $10.5-15$ | Good |

### 2.3.1 Question 14: Teaching and Learning Strategies and Techniques

This question was constructed from the topic of Teaching and Learning Strategies and Techniques. The candidates were required to support the statement which stated that; future's wheel is a strategy suitable to illustrate the complexity of factors that contribute to a specific situation; by
(i) explaining five procedures of using future's wheel when conducting a lesson on the cause of malnutrition.
(ii) using future's wheel teaching strategy to illustrate basic, underlying and immediate causes of malnutrition and their effects.

None of the candidates attempted this question. This might be due to inadequate knowledge of future wheel teaching and learning strategy, hence failed to explain the procedure of using future wheel when conducting a lesson. The candidates also might have inadequate knowledge on the causes (basic, underlying and immediate) of malnutrition and their effects, hence failed to attempt the question. Furthermore, since this section was comprised with optional questions, the candidates had a chance of choosing other two questions that they thought to be easier. Also it has been observed that, this question might be the most difficult to them, and therefore opted for other two questions.

### 2.3.2 Question 15: Teaching and Learning Strategy and Techniques

The topic was constructed from the topic of Teaching and Learning Strategies and Techniques. The candidates were required to (a)
analyse how they would effectively plan and organize a field visit by giving nine points and (b) explain three advantages and disadvantages of field visit.

This question was attempted by five candidates ( $100 \%$ ) who sat for this paper. The data analysis shows that the general performance in this question was good, since 80 percent of the candidates who attempted the question performed average and above. Their scores were as follows: 20 percent of the candidates scored from 0 to 5.5 marks and 60 percent scored from 6 to 10 marks and 20 percent scored from 10.5 to 15 marks as shown in Table 4.

Table 4 Shows the Candidates' performance in question 15

| Score Ranges | No. of Candidates | Performance in <br> Percentage |
| :---: | :---: | :---: |
| $0-5.5$ | 1 | 20 |
| $6-10$ | 3 | 60 |
| $10.5-15$ | 1 | 20 |

The analysis further indicates that, the candidates who performed well were able to analyse how to plan and organize a field trip, though some of the points analysed were incorrect or incomplete. Furthermore, the candidates managed to explain one to two advantages and disadvantages of field trip out of three required by the question. Extract 15 illustrates a sample answer from a candidate's script with good performance.

## Extract 15



## Extract 15 continues......



## Extract 15 continues......

| 15 | H I not well managed it couse loss of attention; this is |
| :---: | :---: |
|  | because tu students act as observer and listernar only |
|  | Key can not consentrate on the fiald visit lesson. |
|  | Therepore inorder to corduet ke tield visit, the teacher |
|  | should infurm both schod autharity as well as the place |
|  | whers be need to conduct a field visit. |
|  |  |


#### Abstract

Extract 15 shows the answer from the candidate who performed well, but he/she failed to score all 15 marks because some of the points were repeated (e.g. Time) or incorrect (e.g. distance) and most of the correct points provided were partially analysed.


Furthermore, inadequate explanation, repetition of some correct point and incorrect responses were some reasons for shortfalls to those who performed poorly.

### 2.3.3 Question 16: Lesson Assessment, Evaluation and Testing

This question was derived from the topic of Lesson Assessment, Evaluation and Testing. The candidates were required to (a) explain in detail four steps in planning a Home Economics test and give two qualities of a good test; (b) describe two qualities of a good test.

This question was attempted by all candidates ( $100 \%$ ) who sat for this paper. The data analysis shows that the candidates' performance was good since 100 percent of the candidates who attempted this question scored from 6 to 10 marks. None of the candidates scored 0 to 5.5 marks and 10.5 to 15 marks. Figure 14 illustrates this performance.


Figure 14: Candidates' Performance in Question 16.

The candidates' response analysis reveals that, the candidates performed well because they had adequate knowledge of planning a test and qualities of a good test. The candidates managed to explain steps of planning a Home Economics test such as determining the purpose of the test, identifying and defining the intended learning outcome, preparing a table of specification and constructing test items. Moreover, the candidates managed to describe two qualities of a good test which are; a good test should be valid and should also be reliable. Despite the fact that the performance of this question was good, the candidates failed to score above 10 marks due to various reasons, including incomplete explanation and non-sequential steps on planning a test. Extract 16 is a sample response from a script of a candidate who performed well.

Extract 16
16 Test is an assessment tool that is used to determi ne the student outcome toward the lesson or towascl the argnitive dardopment of the learners.

The following are the four steps in planning a Home Genomics test.

Identify the purpose of ter test; a teacher should propr re ta test by looking the need of the test, if is to measure student abilities or student speed toward answering the examination:

Content to be testest; a teacher should select the content where the students are going to be tested so as to provide tu test which is ralidy to tee stuelents. Prepare te table of specification; a teacher should can struck a table op specification in oracles to understand tu topic to be tested as well as tee cognitive domain to be measured and ta number of question provided on the test.

The length of the test; a teacher should construct the test which contain many questions in order to increase the validity as well as reliability of the test. If the test is too short hence the reliability well be low:

The following are the two qualities of a gooeltest It should be validly; a good teat should be valid in in order to measure fa intent in to area different areas of tee content is supposed to be tested. Therefore tee teacher should construct ter test in which tee content have been taught to the students.

It should) be reliable; a yod test should provide the similar result when it is measured at elifterent but comparable eandition. When the leader provide the pirsttest to the learner, when a time has passed and he repeat that test to the learner, the learners' score should be

Extract 16 continues.....


Extract 16 shows the answer from the candidate who performed well, but, he/she failed to score all 15 marks because some of the steps were partially explained, incorrect and repeated.

### 3.0 ANALYSIS OF CANDIDATES' PERFORMANCE PER TOPIC

The analysis of candidates' performance was also done basing on the topics by analysing weak, average and good performed topics. In Home Economics examination 10 topics were tested, namely Lesson Assessment, Evaluation and Testing; The Family; Malnutrition; Food Preservation; Adolescent and Early Marriage; Teaching and Learning Methods, Strategies and Techniques; Teaching Material; Sewing Machine, Planning Balanced Meals; Food and Nutrition; and Dressmaking Processes were measured. The analysis helped to identify the reasons which made the candidates to perform weak, average or good in each topic.

The analysis of candidates' performance in each topic shows that the following topics in percentage had good performance: Teaching Materials (100\%), Teaching and learning Strategies and Techniques (80\%), The Family ( $80 \%$ ), Food and Nutrition ( $80 \%$ ), Malnutrition ( $80 \%$ ), Adolescent and Early Marriages (75\%), Lesson Assessment, Evaluation and Testing (73\%) and Planning Balanced Meals (70\%). The good performance on these topics were probably due to the reasons that the candidates were taught intensively on the topics/sub topics measured, hence understood well the contents or the candidates were prepared well for the examination.

The averagely performed topics were; Food preservation (60\%) and Sewing Machine (40\%). The analysis revealed that this average performance was contributed by the lack of the basic knowledge of food preservation, hence the candidates faced difficulties to explain causes of food spoilage. Furthermore, from the topic of sewing machine, the analysis
revealed that the candidates had inadequate knowledge of the functions of various parts of the sewing machine.

On the other hand the analysis also revealed that, the poor performance observed in the topic of Dressmaking Processes was a result of inadequate knowledge on basic skills in dressmaking processes. It has been observed that, possibly this was due to the poor coverage of the topic of Dressmaking Processes since the topic is too broad, the candidates had inadequate preparation for the examination and lack of practical skills of Methods of Arranging Fullness. If the candidates had enough practical lessons on the methods of arranging fullness they have could remembered much more the learnt concepts related to the question. Appendix $A$ illustrates the analysis of candidates' performance per topic in each question.

### 4.0 CONCLUSION AND RECOMMENDATIONS

### 4.1 Conclusion

Generally the conclusion was made on the basis of the question and topics analysed. The candidates' performance in Home Economics subject in DSEE, 2018 was good since 100 percent of the candidates who sat for the examination passed with the following grades: A (0), B (1), C (4) and D (0) and none of them failed as illustrated in Appendix $B$.

The analysis of the candidates' performance in each question indicates that the good and average performance was a result of adequate knowledge of the basic concepts of Food and Nutrition, Teaching Materials, Lesson Assessment, Evaluation and Testing concepts measured. Whereas, the poor performance was a results of the lack of the basic knowledge of Dressmaking Processes concepts, that led the candidates to provide irrelevant answers, unanswered questions and incomplete answers.

### 4.2 Recommendations

Basing on the analysis of the candidates' performance in each question and topics in Home Economics examination, it is recommended that:

- College Principals should provide enough facilities for practical work in dressmaking processes in order to improve the candidates' skills aiming to have competent teachers.
- Tutors should provide enough practical lessons in form of homework since Home Economics is a practical oriented subject. This will enhance student teachers to familiarise themselves in practical work.
- The tutors should apply different teaching and learning strategies/techniques to the student teachers in order to enrich them with various teaching and learning techniques. Other techniques which are not very much common to the students such as future's wheel and visit study techniques should be applied too.
- The Tanzania Institute of Education (TIE) should revise the Home Economics teaching methods syllabus for Diploma in Secondary Education in order to cover enough subject content which will enable student teachers to be competent in the subject matter.

Appendix A
The Analysis of Candidates' Performance per Topic in Each Question

| S/n | Topic | Question <br> No. | The <br> Percentage of Candidates with Score of 30 percent and Above | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Teaching Materials | 6 | 100 | Good |
| 2. | The Family | 7 | 80 | Good |
| 3. | Food and Nutrition | 8 | 80 | Good |
| 4. | Malnutrition | 10 | 80 | Good |
| 5. | Teaching and Learning Strategies and Techniques | 15 | 80 | Good |
| 6. | Adolescent and Early Marriages | 13 | 75 | Good |
| 7. | Lesson Assessment, Evaluation and Testing | $1,4 \& 16$ | 73 | Good |
| 8. | Planning Balanced meals | 5 \& 9 | 70 | Good |
| 9. | Food Preservation | 12 | 60 | Average |
| 10. | Sewing Machine | 3 | 40 | Average |
| 11. | Dressmaking processes | 2 \& 11 | 0 | Poor |



