



L-Università
ta' Malta

MATSEC
Examinations Board



Examiners' Report

AM Home Economics and Human Ecology

Main Session 2023

Examiners' Report (2023): AM Home Economics and Human Ecology

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A. STATISTICAL INFORMATION

The total number of candidates who registered to sit for AM Home Economics and Human Ecology was **58**.

Table 1 shows the distribution of grades awarded in the first session examination of 2023.

GRADE	A	B	C	D	E	F	ABS	TOTAL
NUMBER	3	8	15	14	7	5	6	58
% OF TOTAL	5.2	13.8	25.9	24.1	12.1	8.6	10.3	100.0

Table 1: Distribution of grades for Home Economics and Human Ecology 2023 first session.

B. GENERAL REMARKS

General Remarks on Coursework

This year, no mitigation measures were introduced, therefore both the investigation and the food task were required as part of the coursework, which awarded 25% of the final mark.

With regards to private candidates, there were only **3** coursework submitted, which were corrected and later called for an interview.

Overall, a good standard of work was observed and a vast array of very interesting, relevant and current affair titles and topics were chosen both for the investigation and for the food task.

The Research Techniques chosen for the investigation were adequate at answering the candidates' research questions. Interviews and questionnaires were the most popular techniques and were appropriately devised. The general planning and background research were very well structured and relevant to the topic being investigated. Most candidates managed to discuss and evaluate their results as required at this level and managed to link their findings with their background research.

The food study tasks were of very high quality. Candidates excelled in both the food production and food experiments. It is very evident that candidates worked really hard in both of them, and the results obtained were very interesting.

General Remarks on the Written Examination

As in previous years, it has been noted that in general, candidates performed better in Paper I than in Paper II, though this year there was a slight improvement.

C. COMMENTS ON PAPER I AND PAPER II

Paper I

Note: Candidates had to answer any five out of the six given questions. Each question carried 20 marks.

Question 1

Number of candidates who answered this question: 49

Minimum mark attained: 16.5 marks

Maximum mark attained: 20 marks

Mean: 19.4

The overall performance of candidates in this paper was very good.

a) *Definition of the term family unit.*

Candidates gave various good definitions of the term family unit, outlining that the basic family unit consists of one or more adults and children, if any, related by blood, marriage, or adoption and residing in the same household. Those candidates who outlined that the adults and children are related by blood or marriage were not awarded full marks.

b) *Why new family structures are on the increase.*

Justifications commonly given by the candidates for emerging new family structures were:

- separation and divorce legislation.
- Marriage is being delay to adulthood (30+).
- Women are more financial independent and does not need to marry for financial stability.
- Families are having less children because of the very busy lifestyle we lead and because of expenses.
- Society accepting same sex marriages.

c) *Positive and negative implications the changes in family structure are having on the family.*

Candidates performed well in this part of the question.

Common positive implications outlined were: Less economic stress on the family as families have fewer children, and fostering and adoption might increase due to same sex marriages.

The most common negative implications outlined were: more stressful for a woman to bear the financial and family responsibilities on her own, and more family breakups as the couple may find difficulties in getting accustomed to 'new' married life.

d) *Implications of young people residing away from home, on the family members.*

Many candidates seem to relate this situation to Gozitan students who leave their families to study in Malta. Many outlined the stress and loneliness that the young person will feel when living on his/her own. A number of candidates outlined the heavy heart parents, knowing that the young youths left the nest to further their education. Some on the other hand, outlined that it provides an opportunity to young people to become independent and learn to fend on their own and make new friends. Financial difficulties that the young people may experience when living on their own, were also outlined by a good number of candidates.

e) *Reasons, apart from infertility issues, why people might choose to adopt a child.*

Candidates performed very well in this question, outlining a plethora of reasons for such a decision.

Common reasons outlined were:

- Show a humane gesture to help children, giving a child a loving home.
- When a single parent wants to start a family.
- Same-sex couple who want to become parents.
- Women who want to become mothers, but does not want to become pregnant.
- Be generous with children who are going through hardiness in life, example poverty, war and unstable family.

A handful of students also outlined that the adoptive family might want to choose the gender of their child, and this is not possible with natural pregnancies.

f) *Ways how the government supports individuals or couples who are in the process of adopting a child.*

Responses indicate that candidates had a very good idea on how the government supports individuals or couples who are in the process of adopting a child. Common responses were:

- Adoption leave for adoptive parents (this also applies to local adoptions).
- The grant of 10,000 Euros for Prospective Adoptive Parents.
- €1,000 grant for people who adopt a child locally.
- Psychological and family counselling and support services throughout the adoption process.

Some candidates also outlined family-friendly work measures, example flexitime and reduced hours, as well as child allowance. These were not considered as correct as these do not apply explicitly for the adoption process.

g) *Ways how an adopted child benefits from the introduction to a new family.*

The most popular answers were:

- Providing a caring and a loving home to the adopted child.
- Ensure safety and a secure home.
- Providing a positive family experience.
- Better quality of life, including health.
- Offering better future opportunities to the child.

h) *Challenges that an adoptive family might face before adoption and after adoption.*

Popular challenges outlined before adoption included:

- Adoption process is lengthy and stressful.
- Financial problems.
- Anxiety until being matched with a child.
- Stress to proof that one can care for a child.
- A lot of legal paperwork.

Common challenges after adoption identified by the candidates were:

- Family and adopted child may experience racism and not be accepted in the family or community.
- The adopted child may have difficulties to settle in this new country or family.
- Parents might feel that they do not know how to deal with the newcomer.
- Language and communication barriers if the children are not so young.

i) *Factors which indicate a good quality of life for the adoptive child.*

Candidates outlined correct factors which indicate a good quality of life for the adoptive child. These included:

- The provision of a safe environment at home.
- Love and attention from parents and other family members.
- Adequate and nutritious food serving.
- Warm clothes.
- Leisure activities with family and friends.
- A good education and a stimulating learning environment are provided.

Question 2

Number of candidates who answered this question: 49

Minimum mark attained: 8 marks

Maximum mark attained: 20 marks

Mean: 17.2

This question included an array of questions mainly about adult's responsibilities, family friendly measures and child development.

a) *Responsibilities that adults within a family have towards their children; partners; and elderly relatives.*
This part of the question was answered correctly by the majority of candidates.

b) *Family friendly measures to help families when parents work, apart from free childcare centres.*
When asked about the different friendly family measures, a lot of candidates included Klabb 3-16, free school transport, breakfast club, flexi time, job sharing and reduced hours.

c) *How childcare centres cater for the needs of the parents, and children.*
For this part of the question candidates showed good knowledge of childcare centres and how they cater for the needs of both the parents who make use of such service and the children who attend.

d) *Activities that a childcare worker can use to help the child develop.*

Candidates were very creative in this part of the question and managed to identify various interesting activities that can be carried out by childcare providers.

e) *Basic needs of children.*

f) *How the provision of basic needs helps the child develop.*

When asked to list and explain how the basic needs help children develop, candidates faced some challenges to answer well, especially when it comes to explaining and linking the basic need with the justification of how it helps the child develop. However, some candidates did manage to answer well this question, by even mentioning Maslow's Hierarchy of needs.

Question 3

Number of candidates who answered this question: 38

Minimum mark attained: 6 marks

Maximum mark attained: 16 marks

Mean: 11.2

The question focused on shopping and waste management. Overall, the candidates' performance was average.

a) *Influences, other than environment-related influences, that affect the consumers' buying behaviour.*

Many candidates did not mention the specific influence but just gave direct examples of these influences, and hence lost marks. Others gave other influences than those listed in the marking scheme and since it is explicitly outlined in the marking scheme not to accept any other influence, reflecting also the syllabus' requirements, candidates were not given marks for other influences outlined.

Common responses given by candidates were:

- Personal influences: knowledge, likes and dislikes, and values.
- Social influences: gender, family roles, social status, cultural trends.
- Economic influences: income, price, interest charged for hire purchase, saving and borrowing.

b) *Identification of symbols usually found on a number of products.*

Responses indicate that a good proportion of the candidates who attempted this question did not know the exact meaning of the symbol. For the first symbol, some candidates outlined it as a rubbish symbol or dispose in bin.

Very few candidates identified correctly the Glass recycling symbol. Many referred to it as the recycling symbol. Candidates also lost marks when explaining the symbol as they never mentioned glass items but simply other recyclable material, mainly paper.

As for the Green Dot, students commonly referred to it as Eco-friendly or Green Eco label. Very few candidates knew that the Green Dot is a license symbol used on packaging in some European markets which shows that a fee has been paid to fund the recycling of that packaging when it becomes waste.

c) *Identify and briefly explain features that green consumers should look for when buying a new washing machine.*

Candidates did well in this question. The most common features mentioned were:

- The Energy label: an energy label of A or better.
- Buying good quality machine: so the washing machine will last longer.
- Choosing a washing machine that uses less water.
- Checking the machine for noise pollution. Choosing one with a low impact on noise pollution.

A few candidates also mention the CE mark. However, since this is not an environmental related symbol, candidates were not given marks for it.

d) *How the Beverage Container Refund Scheme works.*

Since this scheme was introduced only recently, the candidates did know how the scheme works. Many answered this part of the question correctly.

e) *Beverage containers that can be recycled using this scheme.*

A good number of candidates did list appropriate beverage containers that can be recycled using this scheme. However, some incorrect containers outlined included milkshake bottles, wine bottles and fruit juice bottles.

f) *Describe what happens to the beverage containers once they are collected.*

Many candidates did not get full marks for this question, as many did not know the correct process. Many did outline that the containers are collected from the BCRS vending machine and taken to another place. However, few knew that they were taken to the BCRS Malta's clearing centre in Hal Far. Some even incorrectly outlined that the containers are taken to the engineered landfill.

Some candidates then outlined that the material is sorted according to material's type using specialised equipment, after which it is recycled. It should be stressed that in Malta we do not have a facility where material can be recycled. The material is packed efficiently and exported for recycling.

A handful of candidates, also erroneously, outlined that the recovered material is burnt for energy production.

Question 4

Number of candidates who answered this question: 35

Minimum mark attained: 7 marks

Maximum mark attained: 20 marks

Mean: 15.2

This question was yet another popular choice for the candidates. Candidates did fairly well in this question.

- a) *Consumer rights and responsibilities.*
- b) *Legal vs commercial guarantee.*
- c) *Benefit of having a guarantee for the retailer; and the consumer.*

Almost all candidates stated valid consumer rights and responsibilities but when differentiating between legal and commercial guarantee, a lot of candidates left out crucial details to differentiate between the two types of guarantees. However, the majority of the candidates did manage to provide valid benefits of having a guarantee, both for the retailer and for the consumer.

- d) *Most suitable method to redress according to situation given.*
- e) *Other methods to redress.*
- f) *Important factors one must keep in mind when redressing.*

Many managed to identify different methods of redressing, mentioning letter and emails, telephone calls and redressing through the MCCA. Some candidates also included that one can redress using online forms on the seller's website, and considering that this method is becoming more apparent, it was decided that such answer is to be accepted as correct.

Question 5

Number of candidates who answered this question: 49

Minimum mark attained: 12 marks

Maximum mark attained: 20 marks

Mean: 17.8

Overall, candidates fared very well in this question which focused on shopping and payment methods. All the candidates who sat for this examination attempted this question, and a good number of candidates scored the maximum mark of 20.

- a) *Advantages and disadvantages of online shopping and teleshopping.*

Many candidates did list correct advantages and disadvantages of both online and teleshopping. Many highlighted the convenience and the 24/7 service available for this type of shopping.

- b) *Different methods of payment*
- c) *Advantage and disadvantage of the methods of payment.*

The majority of candidates identified and outlined correct methods of payments. However, a handful outlined incorrect methods of payment, such as bartering, standing order, electrical payments and monthly payments. With regards to advantages and disadvantages, once again candidates fared very well in this part of the question, as they did outline correct advantages and disadvantages of the methods of payments.

- d) *Benefit for a retailer having an EPOS system and barcodes.*

Many candidates did do well in this question, even though some candidates did mix the two systems up. Many candidates did outline that EPOS (electronic point of sale) allow retailers to speed up checking-out processes, completing transactions, and keeping on top of inventory from a single device. As for barcodes, many outlined that these are applied to products as a means of quick identification, making it faster and easier to identify items at a store, supermarkets, or track inventory in a warehouse.

Question 6

Number of candidates who answered this question: 29

Minimum mark attained: 5 marks

Maximum mark attained: 17.5 marks

Mean: 10.6

This question tackled budgeting, financial advice, and insurances policies. A good number of the candidates opted to answer this question, yet their performance was average.

- a) *The importance of a budget for people who have just started working.*
The first part of the question was easy, and candidates were very knowledgeable about budgeting. This may be due to the fact that the scenario given set the scene to a reality they are familiar with.
- b) *Implications of ending in debt.*
The implication of ending in debt led to various answers mainly stress, poverty and social exclusion, effect on health due to insufficient money to buy healthy food and having to change one's lifestyle.
- c) *Place to seek financial advice.*
When asked to state places from where one can receive financial advice, the majority answered well. However, a good number of candidates mentioned the family, which wasn't accepted as an answer.
- d) *Different credit options and their uses.*
Some included incorrect answers such as different types of bank accounts and debit cards. Some candidates explained different credit options but did not give the uses of the credit options.
- e) *Limitations that credit options can pose.*
In this part of the question, various answers were given. It was decided to accept answers which were not included in the marking scheme but were still very relevant, such as that one must be at least 18 years old and that a person must have a fixed employment to be able to be qualify for a credit option.

f) *Difference between life insurance and life assurance policy.*

g) *Benefits of having a life insurance.*

A lot of candidates did not manage to correctly differentiate between life insurance and life insurance, but many gave correct benefits for having a life insurance.

h) *Types of insurances available in Malta.*

For this part of the question, almost all candidates identified correct insurances, such as health, travel, home, and car insurances.

Paper II

Note: Candidates had to answer any five out of the six given questions. Each question carried 20 marks.

Question 1

Number of candidates who answered this question: 46

Minimum mark attained: 0.25 mark

Maximum mark attained: 17 marks

Mean: 8.6

This question was one of the popular questions chosen by candidates sitting for this year's exam.

a) *Aetiology of osteoporosis and susceptible group.*

Most of the candidates who answered this question managed to obtain partial marks for the first part of the question since most of them mentioned that this is a condition which affects the bones but were not able to give a full, detailed answer.

For the second part of the question, most candidates managed to obtain the full marks, with the most common answers being age and gender, however it was noted that the most common mistakes were in identifying 'vegans' and 'pregnancy'. These were not accepted since there is no scientific proof that these people have a higher chance of developing osteoporosis.

b) *Dietary and non-dietary factors that delay the development of osteoporosis.*

The majority of the answers given were correct, with the most common answers for dietary factors being the consumption of calcium-rich foods and consuming food sources of vitamin D. The most common non-dietary factors mentioned were the increase of physical activity, reduce smoking and having enough sun exposure. It was noted that some candidates performed poorly in this part of the question because their responses were not related to 'delaying' the development of osteoporosis, but instead, they wrote factors which increase the risk of developing this condition.

c) *Why is the bone scan carried out.*

When answering this part of the question, it was noticed that many answers lacked detail and thus, a lot of the marks were not awarded.

Why middle-aged women need to get tested.

Many candidates lost the mark allotted for this part of the question because their answer was not clear and the attempt to link the loss of bone density to menopause was inadequate.

d) *Justifying statements about calcium using scientific principles.*

In general, responses indicate that candidates performed poorly in justifying the given statements using scientific principles. Most answers provided were very brief and lacking the required detail expected at AM level. Some answers provided were simply a rewording of the question and thus no justification was given. Others tried but went out of point.

e) *Conditions related to low intake of calcium, different from osteoporosis, and the susceptible group.*

Many candidates were able to provide correct conditions, other than osteoporosis, which are linked to low intake of calcium. However, 'tooth decay' and 'scurvy' were not accepted.

In the part of the question where they had to differentiate the condition identified from osteoporosis, only a few were able to give the expected details on how this condition differs from osteoporosis.

For the part on susceptible groups, in most cases, candidates were not specific on the group of people identified but gave vague answers, such as 'adults'.

Question 2

Number of candidates who answered this question: 17

Minimum mark attained: 2 marks

Maximum mark attained: 15.5 marks

Mean: 8

This was not a popular choice by the candidates. The question focused on pulses.

a) *What are pulses and types of pulses commonly used in Malta.*

Most of the candidates did not properly outline what pulses are and found it difficult to list types of pulses commonly used in Malta.

b) *Nutritional analysis.*

Most of the candidates did not give a detailed analysis as expected at this level. Consequently, candidates mentioned carbohydrates and protein in their analysis, without giving any additional detail.

c) *Statement justification.*

Most candidates managed to provide an adequate justification why the use of pulses or soya bean products into meals instead of meat is a great way of planning economical and healthy meals.

d) *Traditional Maltese recipes, using pulses as a main ingredient.*

e) *How to increase consumption of pulses in the diet.*

Many candidates managed to list traditional Maltese recipes which use pulses and to suggest ways how the consumption of pulses can be increased in the diet.

- f) *Points to consider when purchasing and preparing dried pulses for cooking.*
- g) *Toxicity of certain types of pulses.*

Most of the candidates' attempt to apply adequate scientific principles was poor.

Question 3

Number of candidates who answered this question: 47

Minimum mark attained: 4 marks

Maximum mark attained: 17.3 marks

Mean: 10.2

This question was another popular choice with candidates. The question focused on proteins and dairy products.

- a) *Role of protein in the human diet.*

The majority of candidates were able to provide two correct roles of proteins in the body. The most common answer was for growth and repair of muscles.

- b) *Reason why proteins are labelled as macronutrients.*

Most candidates gave the correct reason why proteins are considered as macronutrients.

- c) *Foods containing all the essential amino acids.*

This was a very well answered part of the question. Most candidates obtained the allotted mark, with the most common answer being meat, dairy products and soybeans.

- d) *How complementary protein food function.*

A very good number of candidates were able to provide a good explanation of how complementary food function, with many of them explaining how mixing 2 LBV foods will provide the diet with an HBV meal. Most of the examples provided were also correct, with the 'beans on toast' example being a popular one. However, it was still observed that a number of candidates own the misconception that complementary foods is only when mixing an HBV food with and LBV food.

- e) *Why choosing locally produced yoghurt is better.*

This question was also answered well in most cases and candidates managed to justify the purchasing of local yoghurt. The most common justification given were to reduce food miles, to have a fresher product, and to sustain the local economy.

- f) *Justifying statements about yoghurt using scientific principles.*

A number of marks were lost in this question because candidates did not provide enough detail in their answers, and this results in fractions of the marks being lost. Detailed answers were expected, such as including the names of the bacterial cultures added in milk and the pH dropping if not kept in cold temperatures and how this would impact the stability of the product. Some answers given also lacked scientific principles.

g) *Ways to include yoghurt in dishes.*

Candidates were able to provide interesting ways how yoghurt can be included in dishes. The most common answered included adding to fruit, adding it to curries and adding it to smoothies.

h) *Defining the term enzymes.*

Most candidates were able to define enzymes.

The process of making yoghurt.

In most cases, most of the marks were lost because of lack of detail, incorrect sequential order or because this was left out. In the cases where some marks were awarded, candidates wrote some of the main steps e.g. pasteurization, adding cultures and packing. However, scientific details were left out.

Question 4

Number of candidates who answered this question: 49

Minimum mark attained: 2 marks

Maximum mark attained: 17 marks

Mean: 10.1

Almost all candidates opted for this question which focused on the nutritional and financial needs of elderly.

a) *Factors to keep in mind to prepare economical healthy meals.*

In the first part of the question, the general attempt to outline considerations to keep in mind to prepare economical healthy meals was poor, as the focus was solely on nutritional factors instead of economical ones.

b) *Statement justification.*

With regards to the justification of various statements related to the nutritional needs of an elderly, many candidates answered this part adequately.

c) *Energy-saving appliances and how they can be used to retain nutrients.*

Candidates listed and highlighted suitable energy-saving appliances that can be used in meal preparation without hindering the nutritional profile of food.

d) *Factors that must be considered when elderly people are planning their meals, apart from nutrition and budget.*

Candidates outlined adequate factors that must be considered when planning meals. Candidates were able to apply their knowledge quite comfortably in this question.

Question 5

Number of candidates who answered this question: 46

Minimum mark attained: 3.5 marks

Maximum mark attained: 15.3 marks

Mean: 8.3

a) *Define game and poultry.*

Responses indicate that the majority of candidates were unable to define game and poultry. There seem to be lack of knowledge on these two terms, with only a handful being able to define game and a few more were able to define poultry. A common error was when poultry was defined as being all the white meat, with some giving rabbit as an example.

Nutritive difference.

Since the previous part of the question was answered incorrectly, candidates found it difficult to bring the nutritional difference between the two. Some candidates made the link of low saturated fat in game animals when compared to farmed poultry.

b) *The difference between organic, free range and battery chickens.*

In this part of the question, it was noted that candidates tend to give very short answers and lacking the required details at this level. It is important to note that two common misconceptions were evident; the first was that battery chicken is the same as barn chicken farming. Secondly, a number of candidates thought that free-range farming always involved organic practices.

Reason why consumers might prefer free range chicken meat.

In the majority of the answers, candidates were able to give correct reasons for this part of the question, with the most common answers being that consumers are worried about the welfare of animals.

c) *Evaluating the given statements, giving the scientific principles.*

Unfortunately, candidates seem to have struggled a lot when answering a question which involves evaluating a statement as in most cases, lack of detail is provided, and this results in losing a lot of the allotted marks.

d) *Nutritive analysis of an egg.*

In general, candidates were able to identify correct nutrients which one may obtain when consuming eggs, however, many of the answers did not provide a detailed analysis and this resulted in the deduction of marks. The most common answers provided were proteins, fats and vitamins.

e) *Healthy traditional Maltese dishes using poultry or eggs.*

Candidates performed very well in this part of the question. The most common answers were the froġa tat-tarja, brodu tat-tiġieġ and tiġieġ il-forn. Some answers were not accepted because they either did not consist of poultry or eggs as a main ingredient, or because the named dish cannot be considered as healthy.

f) *Roles eggs have in various dishes.*

This last part seemed to have put a challenge for candidates because many lost marks either because they did not provide the correct roles or, because they listed the roles but did not outline them. In both cases, marks were lost. For those who did answer correctly, the most common answers given were aeration, glazing and emulsification.

Question 6

Number of candidates who answered this question: 45

Minimum mark attained: 4 marks

Maximum mark attained: 16.5 marks

Mean: 10.1

A high percentage of candidates opted for this question, which was about hypertension and pregnancy.

a) Aetiology of hypertension.

The performance of almost all candidates to explain in detail hypertension's aetiology was very poor. In fact, marks were not fully awarded on multiple occasions as candidates only focused on the diastolic and systolic readings of a person's blood pressure without relating it to the condition.

b) Symptoms of hypertension

c) Implications of hypertension if not detected and treated.

Many candidates successfully identified the main symptoms and implications of hypertension. However, it was noted that some candidates confused symptoms and implications and went on to provide the exact same answers for both the symptoms and the implications part of the question.

d) Dietary and non-dietary changes to control gestational hypertension.

e) Nutrients which a pregnant mother should increase during pregnancy.

With regards to the assessing of dietary and non-dietary changes that a pregnant women should make, most of the candidates gave valid answers. However, candidates' attempt to provide a detailed nutritional justification about the nutrients which must be increased during pregnancy was insufficient.

D. CONCLUDING COMMENTS

The examiners noted that in general, candidates should be reminded that questions need to be answered in the required detail, including important scientific principles expected at Advanced level standard. Oftentimes marks were missed because answers given either lacked details or had the scientific explanation and justification missing.