

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD  
UNIVERSITY OF MALTA, MSIDA  
MATRICULATION EXAMINATION  
INTERMEDIATE LEVEL  
SEPTEMBER 2015

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<b>SUBJECT:</b>	HOME ECONOMICS & HUMAN ECOLOGY
<b>DATE:</b>	5th September 2015
<b>TIME:</b>	4.00 p.m. to 7.00 p.m.

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**SECTION A (40 marks)****ANSWER ALL QUESTIONS**

1. Outline **FOUR** benefits of online shopping for an elderly person residing in a residential home. (4 marks)
2. Define essential and non-essential amino acids and give **TWO** examples of each type of amino acid. (2, 2 marks)
3. Water-soluble vitamins can be denatured and lost during cooking. Explain how certain methods of cooking can avoid the loss of these vitamins. (3 marks)
4. Outline **TWO** positive and **TWO** negative implications of the use of technology on the development of children. (4 marks)
5. State the difference between *retinol* and *carotene*, and outline **THREE** dietary sources for each. (2, 3 marks)
6. A family is experiencing an unexpected illness and has limited finance to cover the medical expenses. Outline **TWO** different methods how the family can source financial means to settle medical bills. Outline **ONE** advantage and **ONE** disadvantage for each finance sourcing method. (1, 2, 2 marks)
7. Define *trans fatty acids* and explain their role in the food industry. Outline the impact of trans fatty acids on human health. (1, 1, 2 marks)
8. Seeds and nuts are good sources of protein. Name **TWO** other different nutrients found in seeds and **TWO** other nutrients found in nuts. Describe how seeds and nuts can be beneficial for the well-being of a vegan. (1, 1, 3 marks)
9. Describe briefly **THREE** services which are provided by the state and/or NGOs for elderly persons who suffer from abuse from relatives or friends. (3 marks)
10. The role of carbohydrates as a vital micronutrient is sometimes overlooked by those people who want to lose weight.
  - i. State the role of carbohydrates in the body.
  - ii. Explain the reason why people who are on a weight loss diet are encouraged to consume carbohydrate foods that have a low glycaemic index. (1, 2 marks)

**SECTION B (60 marks)**  
**ANSWER ANY THREE QUESTIONS**

**Question 1**

- A. In recent years, consumers became more conscious of Fair Trade products.
- i. Identify **THREE** ethical characteristics underlying Fair Trade products. (3 marks)
  - ii. Name **FOUR** Fair Trade products that can be locally purchased and describe how consumers can identify such products. (2 marks)
  - iii. Outline **THREE** different challenges that are faced by Fair Trade producers. (3 marks)
- B. A young adult who lives alone wishes to purchase a steam iron. An advertisement on a flyer presents different models of steam irons.
- i. List **TWO** advantages of advertising for each of the following:
    - a) consumers;
    - b) retailers. (2, 2 marks)
  - ii. Outline **TWO** other ways how he can obtain further information about steam irons and list **TWO** advantages and **TWO** disadvantages for each mode of information. (1, 2, 2 marks)
  - iii. After making an informed decision, he purchased an iron that was most suited for his needs. Following first time use, he noticed that a particular feature of the iron was not functioning properly. Describe, in detail, the procedure that he needs to take to make a redress. (3 marks)

**Question 2**

In recent years, many supermarkets and health food shops in various localities in Malta have introduced a large variety of products targeting consumers with specific health conditions, such as for those suffering from *lactose intolerance*, *coeliac disease* and nut allergies.

For **EACH** health condition written in italics mentioned above,

- a. Describe the physical and/or biological changes that take place in the body of a person suffering from these health conditions. (3, 3 marks)
- b. Identify **TWO** possible symptoms. (2, 2 marks)
- c. Describe **THREE** dietary changes that a person suffering from such conditions needs to make to ensure a better quality of life. (3, 3 marks)
- d. It is the responsibility of the person with a food allergy or their family/carers to ensure that all the correct steps are carried out to reduce as many of the risks as possible. Outline **FOUR** factors that need to be considered by people suffering from nut allergies when dining out. (4 marks)

<b>Question 3</b>
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- a. Name the **THREE** chemical elements common in all carbohydrates and give their ratio to one another. (3 marks)
- b. Describe how the different disaccharides are formed and name **TWO** specific examples for each of the three groups. State **TWO** food sources for each of the three groups. (1, 3, 3 marks)
- c. Describe the role of non-starch polysaccharides (NSP) in the body. Name the **TWO** types of dietary fibre and give a function for each. Give the daily recommended intake of NSP for an adult. (2, 2 marks)
- d. Identify the future implications of a diet consistently low in NSP for a young adult in his mid-twenties. (3 marks)
- e. Baked Aubergines (*Brungiel il-Forn*) and Stuffed Courgettes (*Qarabaghli Mimli*) are two traditional Maltese dishes that make use of minced meat as one of the main ingredients for their stuffing. Describe how to modify these recipes to address the need for the inclusion of more sources of NSP in the Maltese diet. (3 marks)

<b>Question 4</b>
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A university student would like to obtain *an international debit card* or *a credit card* to make purchases online.

- a. Outline the difference between the above mentioned cards. (3 marks)
- b. Describe the procedure that the student needs to follow to apply for these cards from a local bank. (4 marks)
- c. State **TWO** advantages and **TWO** disadvantages of using a credit card. (2, 2 marks)
- d. List **THREE** precautions that need to be taken when using these cards at an EPOS. (3 marks)
- e. Identify **FOUR** ways how this teenager should avoid running into debt. (3 marks)
- f. The student's local bank provides the service of free *internet banking*. Describe how the student can benefit from this service. (3 marks)