

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

SUBJECT:	HOME ECONOMICS & HUMAN ECOLOGY
DATE:	2 nd May 2015
TIME:	4.00 p.m. to 7.00 p.m.

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

1. Outline **THREE** main functions of water in the human body. Explain the impact of an excess and a deficiency of water on the human body. (3, 2 marks)
2. Barbequed food can pose health hazards due to food poisoning. Outline **THREE** precautions that should be considered when cooking chicken thighs and sausages for a barbeque. (3 marks)
3. Regular exercise and physical activity is essential for a healthy body. Outline **TWO** benefits of exercise for each of the following groups: i) teenagers, and ii) the elderly. (2, 2 marks)
4. Describe **THREE** initiatives hotel owners could adopt to participate in the national energy sustainability drive. (3 marks)
5. Explain the cause of *osteoporosis* and identify **TWO** dietary and **TWO** non-dietary recommendations that can be followed to delay the onset of this condition. (1, 2, 2 marks)
6. A single mother of two school-aged children aims to join the labour force. Outline **TWO** benefits for the mother to have a job. Describe **TWO** services offered by the state to assist her with the care of her children whilst in employment. (2, 2 marks)
7. Some fad diets completely rule out the need for carbohydrates. Outline **TWO** repercussions of a diet low in carbohydrate. (2 marks)
8. Explain the difference between *nutrient goals* and *dietary guidelines*. Describe how a parent of a young toddler can apply the national dietary guidelines when preparing food for the child. (2, 4 marks)
9. Outline **FOUR** recommendations a consumer should follow in order to be more sustainable when buying fish. (4 marks)
10. Statistics indicate that the Maltese waste 22% of food purchased. Outline **FOUR** measures that a household should adhere to in order to avoid wasting food. (4 marks)

SECTION B (60 marks)
ANSWER ANY THREE QUESTIONS

Question 1

Macronutrients provide energy for various bodily functions.

- a) Give the energy value of **EACH** macronutrient. (3 marks)
- b) Outline the need of food energy by the body and explain how this differs in different individuals. (1, 3 marks)
- c) The centre *Dar Kenn għal Saħħtek* was recently established to provide medical and psychological support to youths and young adults suffering from eating disorders. Describe **THREE** eating disorders, highlighting **TWO** symptoms and **TWO** negative effects of **EACH** of these conditions on human health. (3, 3, 3 marks)
- d) A holistic approach, including family therapy, is often recommended when dealing with a person who has eating disorders. Describe briefly **EIGHT** ways how the family can be of help to the individual suffering from such disorders. (4 marks)

Question 2

- A.** A Eurostat survey revealed that overseas online shopping is popular among Maltese consumers.
- i) Give **TWO** reasons why Maltese consumers are opting to purchase goods online from overseas retailers. (2 marks)
 - ii) List **THREE** advantages of online shopping over normal face-to-face shopping. (3 marks)
 - iii) Outline safety precautions that consumers should take to ensure safe online shopping. (3 marks)
 - iv) Explain the rights of the consumer if an item bought online was found to be faulty. (2 marks)
- B.** Maltese consumers have the possibility to buy local produce from farmers' markets with very low food mileage.
- i) State **FOUR** benefits of buying food produce from these markets. (4 marks)
 - ii) Explain the term *food mileage* and the benefits of consuming foods with a low food mileage. (1, 2 marks)
 - iii) Locally grown mushrooms can be bought from these local farmers' markets. Explain how a consumer can check the freshness of mushrooms and state how these should be stored at home. (1, 2 marks)

Question 3

Vitamins are micronutrients that have various functions in the human body. A deficiency or excess intake of vitamins can have negative impacts on human health.

- a) Explain the term *micronutrients* and name the two units of measurements in which they are usually recommended. (1, 1 marks)
- b) Explain how vitamins are classified and explain the **TWO** major differences between the two groups. (1, 2 marks)
- c) A young teenager purchased a fruit beverage and the label states that the drink is enriched with Vitamins A, C and E.
 - i) State the chemical names of these vitamins. (3 marks)
 - ii) List **TWO** functions and **TWO** natural food sources for **EACH** vitamin. (6, 3 marks)
 - iii) Describe the physiological effects of diets which are deficient in these vitamins. (3 marks)

Question 4

The year 2014 saw the launch of a renewed Food and Nutrition Policy and Action Plan based on the regional policy framework, *Health 2020*.

“The new Action Plan addresses the negative impact of unhealthy diets and other risk factors in Malta through concrete action on:

- *reducing overall salt and fat consumption;*
- *eliminating trans fats;*
- *using price policies to promote healthier foods and reduce unhealthy products;*
- *restricting the marketing of food to children; and*
- *improving monitoring and surveillance mechanisms.”*

(Source: <http://www.euro.who.int/en/countries/malta/news/news/2014/12/malta-launches-food-and-nutrition-policy-and-action-plan>)

- a) Explain the negative impacts of a high salt and high fat diet on human health. (1, 2 marks)
- b) Describe **TWO** measures that parents can take to ensure that children reduce their salt consumption. (2 marks)
- c) Food preparers can play an important role in reducing the fat consumption of their family members. Highlight methods how this can be implemented. (3 marks)
- d) Define *trans fats* and explain their impact on human health. Outline ways how trans fats can be eliminated from the Maltese diet. (1, 1, 2 marks)
- e) Meat Pie is a popular dish prepared by many Maltese households. Outline **EIGHT** modifications, giving a reason for **EACH**, to create a healthier recipe of this pie, in order to bring it in line with the recommendations outlined in the aforementioned Food and Nutrition Policy. (4, 4 marks)