

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD
UNIVERSITY OF MALTA, MSIDA
MATRICULATION EXAMINATION
INTERMEDIATE LEVEL
MAY 2013

SUBJECT:	HOME ECONOMICS & HUMAN ECOLOGY
DATE:	30th April 2013
TIME:	4.00 p.m. to 7.00 p.m.

SECTION A

ANSWER ALL QUESTIONS (Total 40 marks)

1. Outline **TWO** health-related advantages and **ONE** health-related disadvantage of consuming organically grown herbs. (2, 1 mark)
2. Outline **THREE** reasons for including eco-labels on products. (3 marks)
3. In recent years, manufactures have produced a number of *meat analogues*.
 - a) Define the italicised term.
 - b) Give **TWO** examples of such products.
 - c) Describe **TWO** benefits and **TWO** shortcomings of consuming one of these products.(1, 1, 4 marks)
4. The obesity pandemic is threatening the national health status of the Maltese population, while simultaneously having a negative impact on the nation's economy.
 - a) Outline **FOUR** health related conditions that are related to obesity.
 - b) Suggest **TWO** negative impacts the obesity pandemic can have on the national economy.
 - c) Outline **FOUR** measures that can be adopted by a family to deal with a young obese child.(2, 1, 2 marks)
5. In recent years, the food industry has made considerable progress in relation to the reduction of salt in everyday foods.
 - a) Give the recommended maximum intake of sodium chloride for an average adult man.
 - b) Describe **FOUR** ways how a consumer can reduce the sodium content during the preparation of meals.(1, 4 marks)
6. Malta is one of the world's top ten water scarce countries. The sustainable management of water resources is hence a national priority and a continuous challenge. Outline **FOUR** national measures that are being taken by the state to conserve water. (4 marks)

7. A teenager is planning to leave the family home to pursue studies abroad. Describe the financial strategies that need to be adopted by the teenager when purchasing food. (3 marks)
8. A local life assurance company is advertising a number of products on its website, where customers can choose any type of insurance policy to suit their particular needs.
- Explain the difference between *life insurance* and *life assurance*.
 - Describe a situation when it is indispensable to acquire a life insurance policy.
- (2, 1 mark)
9. Define *functional foods* and give **FOUR** examples of such foods available in local retail outlets. (2, 2 marks)
10. A young working mother has broken her leg whilst playing at the park with her young child. Describe, giving specific examples, **TWO** short-term implications of the mother's lack of mobility for the mother herself, and **TWO** short-term implications for the family lifestyle and routine. (2, 2 marks)

Section B

ANSWER ANY **THREE** QUESTIONS (20 marks each)

Question 1

One third of the food we buy is thrown away. It is estimated that on average, each person throws away about 70 kg of food each year, resulting in several million tonnes of food that goes to waste globally.

- List **FOUR** reasons why food is wasted in households. (2 marks)
 - Describe **SIX** strategies that a family with children can adopt to reduce food waste at home. (6 marks)
 - Locally, *biodegradable* and *recyclable waste*, with the exception of glass, is collected from our homes and processed at the Sant' Antnin Waste Treatment plant. Construction waste is taken to unused quarries and *hazardous waste* ends up in an *engineered landfill*.
- Define the italicised words. (4 marks)
 - Describe the purpose of an engineered landfill. (2 marks)
 - List **THREE** benefits of utilising unused quarries. (3 marks)
 - Describe **TWO** impacts of landfills on the nation's health and **ONE** impact on the economy. (2, 1 marks)

Question 2

Nowadays businesses are relying more on advertisements. However, caution must be exercised as manufacturers can easily manipulate audiences via misleading advertisements.

- i) List **TWO** advantages of advertisements for each of the following groups:
 - a) consumers;
 - b) product and service providers;
 - c) society.

(2, 2, 2 marks)
- ii) Outline **TWO** disadvantages of advertising. (2 marks)
- iii) Identify **FOUR** effective means of advertisements that can be used to market a new product and service, targeted at university students. For each advertising means, outline **ONE** advantage and **ONE** disadvantage for the young consumer. (2, 2, 2, 2, 2 marks)
- iv) Define *misleading advertising* and give specific examples how advertisements can be misleading. (2 marks)

Question 3

- i) Describe, with the aid of diagrams the basic chemical structure of a saturated and an unsaturated fatty acid. (2, 2 marks)
- ii) Mono-unsaturated fatty acids are considered to be beneficial for a healthy diet. List **TWO** advantages of including mono-unsaturated fatty rich foods, and give **TWO** examples of good food sources. (2, 1 mark)
- iii) A food product label indicates that the product is free from *trans fats*.
 - a) Explain the meaning of *trans fatty acids* and describe the benefits for the consumer of purchasing a trans fat-free product. (1, 2 marks)
 - b) List **FOUR** food products that contain *trans fatty acids*. (2 marks)
- iv) Arteriosclerosis is frequently associated with the consumption of a high fat diet.
 - a) Describe the physical and/or biological changes that take place in the body of a person suffering from this health condition. (2 marks)
 - b) List **TWO** possible symptoms. (2 marks)
 - c) Describe **ONE** dietary and **ONE** non-dietary preventive measure that should be taken. (2, 2 marks)

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Question 4

Food guides, nutrient goals and dietary guidelines are produced by expert organisations in order to help individuals make food choices that will result in a balanced diet and an appropriate intake of the different nutrients. Poor adherence to these guidelines can increase the risk for a number of diet-related diseases.

- i) Define the *nutrient goals* and *dietary guidelines* and explain how they are linked. (3 marks)
- ii) State precisely **FOUR** Maltese nutrient goals related to the different carbohydrates and fats. (4 marks)
- iii) Draw a clear labelled diagram of the WHO CINDI Food Guide, indicating the names of the different food groups and dividing the Guide in the appropriate proportions. (5 marks)
- iv) Briefly explain the nutrition and diet-related reasons for the positioning of different food groups in the Food Guide. (4 marks)
- v) Outline and explain the **FOUR** steps to healthy eating, which the CINDI dietary guide highlights for action. (4 marks)