

**MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD**  
**UNIVERSITY OF MALTA, MSIDA**  
**MATRICULATION EXAMINATION**  
**INTERMEDIATE LEVEL**  
**MAY 2017**

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<b>SUBJECT:</b>	HOME ECONOMICS & HUMAN ECOLOGY
<b>DATE:</b>	28 <sup>th</sup> April 2017
<b>TIME:</b>	4:00 p.m. to 7:05 p.m.

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**SECTION A**

**Answer ALL questions**

1. Outline **TWO** advantages and **TWO** disadvantages when buying groceries in bulk. List **TWO** groups of people who would benefit from such method of buying. Explain why this is beneficial to them. (2, 2, 2)
2. *Household waste may be considered as a resource.* Describe **FOUR** ways how this slogan can be promoted on a national scale. (4)
3. Specific micronutrients combinations can aid or hinder absorption of nutrients. Give **TWO** examples of micronutrient combinations that improve absorption. (2)
4. Outline **FOUR** benefits that young children acquire when attending kindergarten centres. (4)
5. Rice and eggs are considered as high-risk foods that are more likely to cause food poisoning. Name **ONE** food poisoning organism for **EACH** food, giving its incubation period and symptoms. (1, 2, 2)
6. Identify **FOUR** features that consumers should check on a legal guarantee document. (4)
7. Describe **THREE** government initiatives that were launched recently to promote energy sustainability of which households could take advantage. (3)
8. Outline **FOUR** ways how protein-rich foods can be included in a school packed lunch of a lacto-vegetarian ten-year old child. (4)
9. List **FOUR** challenges that consumers face when purchasing *Fair Trade* goods. (4)
10. Identify **FOUR** products that should be avoided by middle-aged persons to reduce their sodium intake. (4)

**(Total: 40 marks)**

## SECTION B

Answer ANY THREE questions

### Question 1

In terms of food and health, the concept of *superfoods* is gaining popularity among young generations.

- a) Define the term *superfoods* and give **TWO** examples of such foods. (1, 1)
- b) Outline **TWO** advantages and **TWO** disadvantages of consuming such superfoods on a daily basis. (2, 2)
- c) Explain how the increasing popularity of such foods is having an impact on:
- the retail industry; (2)
  - local food production entities. (3)
- d) A group of health conscious individuals is planning a birthday party for one of its members. Identify **FOUR** food items and **TWO** beverages that can be prepared for this occasion, highlighting the nutrient and health benefits of **EACH**. (3, 6)

**(Total: 20 marks)**

### Question 2

- a) *Osteoporosis* is prevalent in post-menopausal women while *anaemia* is common among young women.
- For **EACH** of the above italicised health conditions:
    - explain how it develops; (3)
    - give the daily recommended intake of the mineral; (2)
    - list **TWO** noticeable common symptoms. (2)
  - Outline **THREE** dietary and/or non-dietary measures which could be adopted by healthy women to lessen their risk of suffering from:
    - osteoporosis
    - anaemia (3, 3)
- b) Baked Rice is a traditional dish that is frequently prepared by Maltese families.
- Give **FOUR** suggestions how this recipe could be modified to increase the non-starch polysaccharide (NSP) content. (2)
  - Outline **THREE** benefits of NSP in the diet. (3)
  - Suggest **ONE** suitable dessert and **ONE** beverage to increase the intake of NSP. (2)

**(Total: 20 marks)**

**Question 3**

- a) Teenagers who finish secondary school may find difficulties in coping with the challenge of studying at a post-secondary educational institution.
- i. Describe **ONE** emotional, **ONE** social and **ONE** economic challenge that teenagers might experience at this stage. (3)
  - ii. Explain how **EACH** of the following could help teenagers during this life stage:
    - other family members or care givers; (1)
    - youth groups in their locality; (1)
    - the former secondary school attended by the teenager; (1)
    - the post-secondary school that they would like to start attending. (1)
  - iii. Name **TWO** state welfare agencies that could support adolescents. Give **ONE** example how adolescents could make use of the services provided by **EACH** agency. (2, 2)
- b) Becoming a grandparent is an important step in adult life. For many people it is a joyful one; opening up possibilities for the grandparents themselves, for the grandchildren and for the parents.
- i. Discuss the above statement by identifying **THREE** ways how grandparents can contribute to the overall wellbeing of their grandchildren. (3)
  - ii. Grandparents need to take care of their well-being by keeping *mentally*, *physically* and *socially* active in their senior years. Describe **TWO** ways how this can be carried out for each of the italicised terms. (6)

**(Total: 20 marks)**

*Please turn the page.*

**Question 4**

- a) Outline the difference between fat-soluble and water-soluble vitamins in terms of:
- i. presence in food;
  - ii. absorption in the body;
  - iii. storage in the body;
  - iv. toxicity in the human body. (4)
- b) Outline the main functions of Vitamin B<sub>9</sub> and Vitamin B<sub>12</sub> for a vegetarian pregnant woman. (2, 2)
- c) Define the term *food fortification* and suggest **ONE** reason why breakfast cereals are often fortified with Vitamin B-complex vitamins. (1, 1)
- d) Name **TWO** sources of Vitamin B<sub>1</sub> and **TWO** sources of Vitamin B<sub>2</sub> other than fortified breakfast cereals. (1, 1)
- e) Vitamin C is a very unstable vitamin. Give the scientific name of Vitamin C and identify **THREE** factors that destroy Vitamin C. (½, 1 ½)
- f) Name **TWO** good sources of Vitamin C and suggest **THREE** strategies that could be adopted while purchasing or preparing food in order to prevent the loss of this unstable vitamin. (1, 3)
- g) Outline **TWO** strategies that could be adopted by parents of young children in order to ensure that their children have an adequate intake of Vitamin C. (2)

**(Total: 20 marks)**