



SUBJECT: **Home Economics & Human Ecology**
DATE: 23rd May 2023
TIME: 4:00 p.m. to 7:05 p.m.

SECTION A

Answer ALL questions.

1. i. Briefly describe how the Civic Amenity Sites work. (2)
ii. Name **TWO** locations where one may find them around Malta or Gozo. (1)
iii. Name **FOUR** different types of waste which may be disposed of in these sites. (2)
2. Outline **FOUR** steps to follow when planning a budget for a university student. (2)
3. Differentiate between dispensable and indispensable amino acids. Name **TWO** examples of **each** type of amino acid. (2, 2)
4. Define hydrogenation and describe **TWO** similarities between hydrogenated vegetable oil and saturated fatty acids. (1, 2)
5. Justify the use of EU energy labels on home appliances. Outline **TWO** benefits for the consumer of buying a dishwasher with a class A energy label. (1, 2)
6. Contactless cards are becoming increasingly popular in a cashless society.
 - i. Define the term cashless society. (1)
 - ii. Name **TWO** advantages and **TWO** disadvantages of using contactless cards. (2)
7. Coronary Heart Disease (CHD) is the leading cause of death in Malta for both men and women.
(State of Health in the EU: Malta Country Health Profile 2019)
List **TWO** dietary and **TWO** non-dietary behaviours that can contribute to the development of CHD. (2, 2)
8. Explain what coeliac disease is. Name **FOUR** types of foods or food products which need to be avoided by a person who is coeliac. (1, 1)
9. Salmonella is a common food poisoning organism. Name **TWO** high risk food sources where salmonella may be present and **TWO** basic strategies for safe food handling during a barbecue in summer. (1, 2)
10. There are various services offered by the Active Ageing and Community Care to improve the quality of life of the elderly. Name **TWO** of the services offered by the Active Ageing and Community Care within the government, which encourage elderly to continue living in the community. Identify **ONE** way how an elderly person can remain active in the local community. (2, 1)

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11. Outline **ONE** advantage and **ONE** disadvantage of convenience foods. Describe **TWO** reasons why it is important to choose fresh foods over convenience foods whenever possible. (2, 2)
12. Dental caries is a common disease which is quite often diet related. Explain how dental caries occurs. Name **TWO** diet related guidelines which help prevent dental caries. (2, 2)

(Total: 40 marks)

SECTION B

Answer **ANY THREE** questions.

1. Carbohydrates are essential in the human body.
- Differentiate between macronutrients and micronutrients and state whether carbohydrates are classified as macronutrients or micronutrients. (1, ½)
 - Outline **TWO** functions of carbohydrates in the body. (2)
 - Name the chemical elements which make up carbohydrates. (1½)
 - Explain the formation of disaccharides and polysaccharides from monosaccharides. (2, 2)
 - Carbohydrates are classified into sugars, starches and dietary fibre.
 - Explain the impact of consuming a diet high in sugars and starches on the body. (2)
 - Explain the impact of consuming a diet low in sugars and starches on the body. (2)
 - Differentiate between soluble and insoluble fibre. (2)
 - Name **TWO** dietary-related conditions which might be avoided if a person consumes adequate intake of soluble and insoluble fibre. (1)
 - Justify the following statements from a nutritional, scientific perspective:
 - A 10-year-old boy requires a higher intake of carbohydrates than his brother, who is 18 years old. (2)
 - Diabetic individuals should consume carbohydrate-rich foods that are unrefined. (2)

(Total: 20 marks)

2. Minerals are elements found in foods that our body needs to develop and function normally.
- Calcium, iron, sodium, phosphorus and potassium are essential minerals. For any **FOUR** of these minerals identify:
 - a role of the nutrient in the body; (4)
 - TWO** common food sources. (4)
 - Outline the effects on the body of a diet low in iron and calcium and name **TWO** strategies to improve the absorption of **each** of these minerals. (1, 1, 1, 1)
 - Name **TWO** factors which might hinder the absorption of iron. (2)
 - Justify, giving a scientific reason, the following statements:
 - An athlete might require a higher intake of sodium in the diet. (2)
 - People with high blood pressure are advised to lower their intake of sodium in the diet. (2)
 - A 30-year-old woman requires more iron than a 60-year-old woman. (2)

(Total: 20 marks)

3. "Consumer legislation does not only protect consumers when they buy goods from traders, but also when they purchase services."

(Consumer rights and responsibilities when buying a service: Times of Malta, July 12, 2020)

- a. List **FOUR** rights and **FOUR** responsibilities of a consumer. (2, 2)
- b. Compare and contrast **TWO** differences between a legal guarantee and a commercial guarantee. (2)
- c. Identify **SIX** factors a consumer should keep in mind when buying goods. (3)
- d. If the item or service purchased is found to be faulty, the consumer has the right to redress.
 - i. Identify **FOUR** ways how a consumer can make a complaint. (2)
 - ii. Highlight **FOUR** points that you need to follow when making a complaint. (2)
- e. Recently consumers have chosen the trend of buying groceries online instead of going to the supermarket.
 - i. Identify **TWO** advantages and **TWO** disadvantages of this practice. (4)
 - ii. Outline **THREE** factors that should be considered when purchasing grocery items to ensure minimal environmental impact. (3)

(Total: 20 marks)

4. Maltese cuisine is the result of a long relationship between the inhabitants and the many civilisations who occupied the Maltese Islands over the centuries. Traditional Maltese food is rustic and based on the seasons.

- a. Give **TWO** ways how Maltese traditional food promotes our identity. (2)
- b. One of Malta’s most popular dishes is Timpana (Baked Macaroni in pastry). Outline **SIX** modifications that can be made to the following traditional recipe to make it suitable for individuals on a weight loss diet. Each modification must be supported by nutritional justification. (6)

Timpana (Baked Macaroni in pastry)	
<ul style="list-style-type: none"> • 400g puff pastry • 400g macaroni • 400g minced pork or beef • 2 onions • 3 tbsp tomato paste • 4 eggs • 100g grated cheddar cheese 	<ul style="list-style-type: none"> • 200g streaky bacon • 250ml beef stock • 1 large can of peas • Butter for frying • Salt and pepper

- c. Choose another traditional dish (except from Minestra) and outline **THREE** ways how it follows or opposes the dietary guidelines. Name the cooking technique used to make this dish and give **ONE** reason how it impacts the nutritional value of the dish. (3, 1, 1)
- d. Maltese cuisine promotes sustainability. Define sustainability and give **FOUR** examples how sustainability may be increased when planning traditional meals. (1, 4)
- e. Outline **TWO** ways how to ensure the retention of nutrients whilst preparing Minestra (Maltese traditional soup). (2)

(Total: 20 marks)