

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

ADVANCED MATRICULATION LEVEL 2022 SECOND SESSION

SUBJECT: Home Economics and Human Ecology

PAPER NUMBER: I

DATE: 29th August 2022 TIME: 9:00 a.m. to 12:05 p.m.

ANSWER ANY FIVE QUESTIONS (20 marks each)

1. The civil union law gives Maltese same-sex couples the same rights as in marriage, including the right to adopt, with the first such adoption taking place in 2016.

(Times of Malta, May 2021)

- a. Outline **TWO** possible reasons why couples are increasingly opting for intercountry adoption rather than fostering. (2)
- b. Identify **TWO** differences and **ONE** similarity between adoption and fostering. (2, 1)
- c. Highlight **TWO** impacts of same-sex parent households on:
 - i. the child; (2)
 - ii. the family; (2)
 - iii. the community. (2)
- d. Describe **THREE** strategies that a secondary school could implement to practise principles of inclusion with a 13-year-old student coming from a same-sex household. (3)
- e. Outline **THREE** basic steps that a same-sex couple should follow when adopting a 6-month-old infant from another country. (3)
- f. Apart from same-sex families, identify **THREE** other changes occurring nowadays in the family unit structure.

(Total: 20 marks)

- A local article reported that "buyers were more interested in affordable properties or homes considered ideal for first-time buyers. It also suggested a large number of sales directly from owners". (Times of Malta, June 2021)
 - a. Identify **THREE** characteristics of dwellings "considered ideal for first-time buyers". (3)
 - b. First-time buyers are often concerned about the additional costs they need to pay. Explain **FOUR** costs incurred by buyers when purchasing a new property. (6)
 - c. Buying a dwelling can take several months. Outline **FIVE** main steps involved in the formal and legal process of buying a new home. (5)
 - d. The Government provides various schemes to assist first-time buyers financing their new home. Identify **TWO** government schemes and briefly explain how **each** can assist first-time buyers. (1, 2)
 - e. Discuss **TWO** advantages and **ONE** disadvantage of buying property directly from the owner. (2, 1)

(Total: 20 marks)

3. "While Government has launched various initiatives to address environmental challenges, more needs to be done in terms of green infrastructure".

(Ministry for the Environment, Climate Change and Planning)

- a. Identify **TWO** global environmental challenges which Malta is presently faced with. (2)
- b. Define green infrastructure. (1)
- c. Outline **TWO** environmental, **TWO** health and **TWO** economic benefits of having greener dwellings. (2, 2, 2)
- d. Describe **FIVE** green adaptations developers can implement in a new block of apartments. (5)
- e. Before approving new accommodations, an Environmental Impact Assessment (EIA) must be conducted. Explain the role of the EIA and name the main authority responsible for such an assessment. (2, 1)
- f. Despite the increase in environmental awareness, development in Malta is still taking place in Outside Development Zones (ODZ). Identify **THREE** ecological impacts of having buildings planned in ODZ. (3)

4. Substance abuse and domestic violence are two issues which may have an influence on a family's quality of life.

Tal-Ibwar Adolescents Therapeutic Centre was recently opened by Caritas Malta. This new residential centre offers therapeutic programmes for adolescents, whose substance abuse is causing significant negative impacts on their lives. Their approach is to actively involve family members as partners in the adolescents' care-plan.

- a. Identify **ONE** physical, **ONE** social and **ONE** financial implication of substance abuse on:
 - i. the individual; (3)
 - ii. the family members. (3)
- b. Suggest **FOUR** ways how the therapeutic centre can involve family members in the care-plan of their adolescents. (4)
- c. Outline **TWO** other services offered by Caritas Malta which help people with substance abuse and their families. (2)

A rise in the number of domestic violence reports was observed since the start of the pandemic.

(Malta Independent, January 2021)

- d. Physical abuse is not the only form of abuse in domestic violence. Identify **FOUR** other forms of abuse commonly seen in domestic violence cases. (2)
- e. Victim Support Malta (VSM) is a non-governmental organisation which provides emotional support and assistance to victims of domestic violence. Suggest **FOUR** forms of emotional support needed by domestic violence victims. (4)
- f. Other services are also offered by various organisations. Name **FOUR** other organisations which offer help to victims of domestic violence in Malta. (2)

(Total: 20 marks)

5. Social media advertising is becoming more popular, especially amongst younger people. a. Outline FOUR advantages and FOUR disadvantages of social media advertising for: i. the consumer; (4)ii. the advertiser. (4)b. Mention **FOUR** examples of how business owners may encourage impulse buying on social media. c. List FOUR examples of misleading advertisements commonly seen on social media platforms. (4) d. Identify ONE local entity consumers can reach to in case they are victims of misleading advertisements. e. Suggest **THREE** security measures one needs to follow when effecting electronic transactions. (3)(Total: 20 marks) 6. A new government document has warned that "by 2030, Malta would be producing 383,580 tonnes of solid municipal waste, which also includes non-residential waste, of which 90% would still need to be landfilled". (Times of Malta, December 2021) a. Suggest **THREE** ways how waste generation can be reduced by: i. households; (3)ii. the construction industry; (3)iii. the hospitality industry; (3) iv. the farming industry. (3)b. Compare **FOUR** features of an engineered landfill and a dumping site. (4)

c. Outline **TWO** basic principles which make up an engineered landfill. (2)

d. Describe **TWO** ways how Malta's retired landfills can be safely rehabilitated to provide an environment which respects the natural surroundings and become an amenity for local communities. (2)



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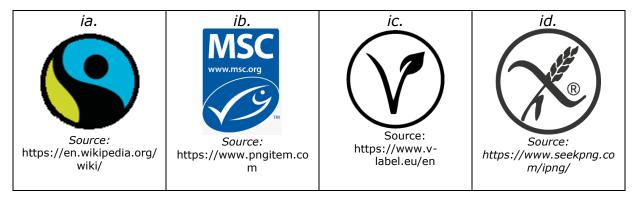
DATE: 30th August 2022 TIME: 9:00 a.m. to 12:05 p.m.

ANSWER ANY FIVE QUESTIONS (20 marks each)

- 1. Fish is one of the main food components of the Mediterranean diet. Fish consumption is actively encouraged because of its nutritional benefits.
 - a. Name **THREE** nutrients found in fish. (3)
 - b. Identify the main nutrient lacking in fish. (1)
 - c. Some traditional Maltese dishes include fish as their main ingredient.
 - i. Suggest **TWO** traditional dishes, which include fish as a main ingredient. (2)
 - ii. For **each** dish suggested in part (c)(i), highlight the ingredient which contains the lacking nutrient mentioned in part (b). (2)
 - d. Name **FIVE** features to look for when buying fresh fish. (5)
 - e. Compare the nutritional value of farmed and wild fish by highlighting **THREE** differences.(3)
 - f. State for how long one should store fresh fish in the fridge and give **THREE** important steps to follow when storing fresh fish in the fridge. (1, 3)

(Total: 20 marks)

- 2. a. Identify **FOUR** reasons why food labelling is important. (4)
 - b. Name **SIX** features which can be found on a food label that are mandatory by the EU regulations. (3)
 - c. Food labels often carry different type of date marks. Differentiate between the two main types of date marks, giving an example of a food that may carry such date mark. (2)
 - d. i. Identify the following **FOUR** symbols commonly found on food labels. (2)



- ii. Explain the use of the symbols given in part (d)(i).
- e. i. Draw the Organic symbol. (1)
 - ii. List **FOUR** food items which may carry the Organic symbol. (2)
 - iii.Discuss, giving **TWO** reasons, why people are opting to consume more organic food. (2)

(Total: 20 marks)

(4)

- 3. According to a study carried out in 2010 by the International Diabetes Federation, 10.1% of all 20-79 year olds in Malta suffer from Diabetes Mellitus. This places Malta in the first quartile within the European region.
 - a. Define and give the aetiology of Diabetes Mellitus. (1, 2)
 - b. Differentiate between the three types of Diabetes Mellitus: Type I, Type II and Gestational Diabetes. (3)
 - c. List **SIX** risk factors which may increase the risk of a person developing Diabetes Mellitus. (3)

(3)

- d. Outline **SIX** recommendations for diabetic people.
- e. Describe **FOUR** complications that may arise from having uncontrolled diabetes. (4)
- f. Suggest **ONE** main meal suitable for an elderly woman who suffers from diabetes. Your answer must include the following:
 - i. the name of the meal and a list of the main ingredients being used; (1)
 - ii. a suitable method of cooking, giving **ONE** reason for choice; (1)
 - iii. **FOUR** main nutrients present in the chosen meal. (2)

- 4. Protein is one of the three macronutrients which our body needs to function properly.
 - a. Name the **FOUR** chemical elements found in all proteins and differentiate between the fibrous and globular structures of protein. (2, 1)
 - b. i. Compare essential and non-essential amino acids. (1)
 - ii. Name **THREE** amino acids essential for adults and **ONE** different amino acid essential only for children. (2)
 - c. Outline **TWO** main roles of proteins in the human body. (2)
 - d. The demand of dietary protein is higher in young children.
 - Identify another **THREE** stages in the life cycle where the demand of dietary protein increases. For **each** life stage, suggest **ONE** reason for the increased protein requirement.
 - ii. Suggest **FOUR** different healthy snacks which are high in protein and can be easily served in a school tuckshop. Highlight the nutritional value of **ONE** of the lunches suggested, explaining how this meets the dietary needs of young children. (2, 2)
 - iii. Describe the digestion of protein, referring to both the physical and chemical processes involved. (5)

(Total: 20 marks)

- 5. Many eating disorders may start from a continuous pattern of disordered eating, possibly promoted by fad diets. Moreover, psychologists and health professionals are researching new sub-types of eating disorders.
 - a. Define fad diets and identify **TWO** examples of such diets. (1, 2)
 - b. Identify **TWO** types of eating disorders and outline **TWO** common characteristics of **each**. (1, 2, 2)
 - c. Explain **TWO** physical effects and **TWO** psychological effects of eating disorders on the individual's well-being. (2, 2)
 - d. Suggest **TWO** forms of therapy appropriate for people suffering from an eating disorder and their families. (2)
 - e. Give **THREE** ways how parents can help their children and growing adolescents develop positive relationships with food and own a positive body image. (3)
 - f. Protein-rich diets and the consumption of protein shakes seem to be an emerging trend.

 Outline **THREE** physiological effects of an excessive protein intake. (3)

(Total: 20 marks)

- 6. Gastrointestinal (GI) health is important for our overall health and well-being. Colorectal cancer and diverticulosis are both prevalent GI health conditions in Malta.
 - a. Explain the aetiology of colorectal cancer and diverticulosis. (2)
 - b. Highlight **FOUR** risk factors of GI health conditions. (2)
 - c. Suggest FOUR ways how the risks to developing GI health disorders may be reduced. (4)

The intestines are the main organs responsible for the digestion and absorption of nutrients. However the bioavailability of certain nutrients can be hindered or facilitated by many factors.

- d. Define nutrient bioavailability. (1)
- e. Outline **THREE** factors which can hinder the absorption of certain nutrients. (3)
- f. Suggest **FIVE** ways how a person can ensure the maximum retention of vitamins when preparing and consuming food. (5)
- g. One form of iron is more bioavailable than the other. Name the **TWO** types of iron, and explain which type is more bioavailable in the body. (1, 1)
- h. Describe the effect of low dietary intake of iron on the body. (1)