

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD
UNIVERSITY OF MALTA, MSIDA

MATRICULATION EXAMINATION
ADVANCED LEVEL
SEPTEMBER 2017

SUBJECT:	HOME ECONOMICS AND HUMAN ECOLOGY
PAPER NUMBER:	I
DATE:	4 th September 2017
TIME:	9.00 a.m. to 12.05 p.m.

Answer any FIVE questions (20 marks each)

1. Binge drinking and alcohol abuse among adolescents and young adults have become a great concern for Maltese society.
- a. Identify **FOUR** reasons why these individuals may engage in alcohol misuse. (4)
 - b. These habits can have an impact on the *social*, *financial* and *emotional* well-being of adolescents and young adults. Outline **THREE** ways how binge drinking or alcohol abuse impact each type of well-being. (3, 3, 3)
 - c. Highlight **FOUR** ways how other persons can be affected by someone who abuses of alcohol. (4)
 - d. Describe **THREE** initiatives that can be promoted by the government, law enforcement and other entities to reduce alcohol abuse, or possibly, to safeguard the lives of people who engage in such a habit, as well as that of others. (3)
- (Total: 20 marks)**
2. Old age is no longer considered a phase of lethargy and time wasting. Today, the trend for retired individuals is to take an active role in improving their physical, cognitive and social well-being.
- a. State the official retirement age in Malta for females and males born after 1962. (1)
 - b. On reaching this age, the first official old-age document one receives is the ‘Kartanzjan’ card. Outline **THREE** benefits of this card for the card holder. (3)
 - c. Different entities are offering various lifelong learning opportunities to encourage active retirement. Describe **TWO** such activities offered by the state and **TWO** by non-states entities. (2, 2)
 - d. Explain **TWO** benefits of lifelong learning opportunities for each of the following:
 - i. the elderly person; (2)
 - ii. the elderly person’s family; (2)
 - iii. society in general. (2)
 - e. The state offers various services to encourage elderly individuals to live an independent life. Outline briefly **THREE** such services. (6)
- (Total: 20 marks)**

3. Whereas consumer rights are given wide publicity, consumer's responsibilities may be less known. Consumers need to be fully aware of both their rights and responsibilities in order to make informed choices.
- a. Define consumer rights and consumer responsibilities, and describe **TWO** rights and **TWO** responsibilities. (2, 2, 2)
 - b. Online shopping is very popular with Maltese consumers. Outline **THREE** reasons that justify such shopping practices. Explain **FOUR** rights and **THREE** responsibilities of the consumers pertaining specifically to this type of shopping. (3, 4, 3)
 - c. A product purchased online is found to be faulty and the overseas European retail company is not willing to compensate the consumer. Name **TWO** entities that can be approached by the consumer to seek advice, and describe the role of **ONE** them. (1, 3)
(Total: 20 marks)
4. Good ventilation and lighting are important for a comfortable and safe living space. Eco-friendly planning for these two design elements saves money for household owners on their electricity bills.
- a. Define ventilation and explain the negative impacts that poor ventilation can have on:
 - i. the building structure;
 - ii. human health. (1, 2, 2)
 - b. Describe **SIX** eco-friendly ventilation systems that can be installed in a house either in its building phase or when finishing the dwelling. (6)
 - c. A dehumidifier is a device that reduces humidity levels in the air and improves the quality of air in a house. Outline **THREE** environmentally friendly features to consider when purchasing a new dehumidifier. (3)
 - d. Explain how the following lighting devices are eco-friendly.
 - i. motion sensitive lighting sensors;
 - ii. LED lights;
 - iii. dimmer switches;
 - iv. tubular solar device (solar light holes). (4)
 - e. A household has a number of fluorescent tubes and incandescent bulbs that need to be disposed of safely. Explain the correct procedure how this can be done. (2)
(Total: 20 marks)

5. A young mother with a 15-year-old adolescent has recently gone through marriage separation. The mother is a housewife and not involved in gainful employment.
- a. Identify **TWO** social, **TWO** emotional and **TWO** financial difficulties that could be encountered by either the mother, or the adolescent, or both due to their new life circumstances. (2, 2, 2)
 - b. Mention and describe **TWO** benefits provided by the state that can help this family manage this difficult time in their lives. (4)
 - c. The mother was advised to seek help from various entities and individuals to cope during this difficult time. Describe how **EACH** of the following can help this family.
 - i. local support services for the mother to find employment; (2)
 - ii. support by the education authorities for the adolescent to help him/her remain on track in his/her education; (2)
 - iii. support from relatives. (2)
 - d. Suggest **FOUR** ways how the adolescent can help his/her mother when she finds employment so as to make this new challenge as smooth as possible for both of them. (4)
- (Total: 20 marks)**
6. A young married couple are planning to celebrate their wedding anniversary by dining out at a restaurant which offers gluten-free food.
- a. Suggest **TWO** sources from where the couple can obtain information on a reputable restaurant. Identify **TWO** advantages and **TWO** disadvantages for each source of information. (1, 2, 2)
 - b. Draw a typical **label** that is used to indicate that a food product is gluten-free. (1)
 - c. The couple is also very environmentally conscious and tries to look out for eco-labels when shopping for food. Name and describe briefly **ONE** eco-label which might be found on:
 - i. a bar of dark chocolate; (2)
 - ii. a can of tuna; (2)
 - iii. a packet of cereal imported from the EU. (2)
 - d. Recently, the couple enrolled in a short course, against payment, about coping with coeliac disease. The online poster they came across on social media advertised that during each session a short break with gluten-free nibbles, recipes and samples of gluten-free packaged foods would be given to each participant. By the end of the course the couple was disappointed as none of the items advertised were given.
 - i. State what was wrong with the advertisement the couple saw on social media. (1)
 - ii. Outline what should be the first action by the couple to resolve this problem. (1)
 - e. The couple is interested in buying a food processor. They came across an advertisement in a local magazine that is distributed in every home.
 - i. Name and describe **THREE** features/items that they should look for when comparing the different types and brands of food processors to help them choose the best one. (3)
 - ii. The couple chose an expensive food processor and decided to pay for it by hire-purchase. Describe how this method of payment works and outline **TWO** precautions which need to be taken when entering into a hire-purchase agreement. (1, 2)

(Total: 20 marks)

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SEPTEMBER 2017

SUBJECT:	HOME ECONOMICS AND HUMAN ECOLOGY
PAPER NUMBER:	II
DATE:	5 th September 2017
TIME:	9.00 a.m. to 12.05 p.m.

Answer any FIVE questions (20 marks each)

1. In the past, our ancestors used to preserve all kinds of foods, a tradition which is no longer very popular among families.

a. Explain **FOUR** benefits of preserving food. (4)

b. A family invited some friends over for dinner and has the following leftover food:

- i. tuna dip;
- ii. pumpkin soup;
- iii. mashed potatoes;
- iv. roasted vegetables;
- v. roasted chicken;
- vi. some fillets of white local fish;

Suggest **TWO** complete two or three-course meals, that this family can prepare with the leftover food the following day, to avoid food waste. (2)

c. Buying food in bulk is a practice which is being promoted to encourage sustainability among consumers. Discuss **TWO** benefits of this practice for each of the following:

- i. the farmer/manufacturer; (2)
- ii. the consumer; (2)
- iii. the natural environment. (2)

d. Give **TWO** reasons why it may **not** be possible for everyone to buy food in bulk. (2)

e. An owner of a greengrocer shop had a surplus of some fruit and vegetables. He decided to give one of his loyal customers the following:

- a large box of fresh tomatoes;
- a few large containers of fresh strawberries;
- a large box of broad beans.

Explain briefly how the customer can preserve these **THREE** raw food items in order to avoid food waste, also making reference to any equipment/materials that would be needed.

(2,2,2)

(Total: 20 marks)

2. Many traditional Maltese recipes no longer form part of the recipe repertoire of Maltese families, especially among the young generation.
- a. Identify **FOUR** possible reasons why traditional Maltese recipes are slowly vanishing from the menu of Maltese households. (4)
 - b. Discuss **TWO** implications of losing local, traditional foods and dishes from our local food culture. (2)
 - c. Name **FOUR** local traditional desserts and evaluate the nutritional value of **TWO** of them. (2, 2)
 - d. Describe **FIVE** ideas how local traditional foods can be adapted to be included as finger foods offered at parties or other events in order to help revive such foods. (5)
 - e. The table below shows the list of ingredients needed to make a typical ‘*Kawlata*’. Outline **FIVE** modifications to make the dish more in line with the Maltese dietary guidelines, giving reasons for your answers. (5)

Traditional Maltese ‘Kawlata’ Recipe	
200g broad beans	300g cabbage
300g smoked pork shank or bacon	1 litre vegetable stock
500g pork belly, without the skin	2 tbsp. tomato purée
500g pumpkin	Freshly ground black pepper
3 celery sticks	1 tsp. fennel seeds
300g carrots	100g pasta
300g butternut squash	100g grated cheese
500g cauliflower	

(Total: 20 marks)

3. The new dietary guidelines for Maltese adults recommend the consumption of two or more servings of fish per week, one serving of which should be oily fish.
- a. Evaluate the importance of this recommendation, given that the consumption of fish by local adults should be higher than that of meat. (2)
 - b. When shopping for fish, the consumer can choose either fish caught in the open-sea (wild) or fish which has been farmed.
 - i. Name **TWO** local species of fish that are caught in the open sea, apart from mackerel, and **TWO** locally-farmed fish. (2)
 - ii. Discuss any differences in the nutritive value between open-sea or farmed fish. (2)
 - iii. Comment on the environmental impact of offering these types of fish for consumption. (2)
 - c. Live fish stocks in the Mediterranean Sea are being depleted. Suggest **FOUR** recommendations of how people can be sustainable consumers of fish. (4)
 - d. Mackerel (Sawrell) is a type of oily fish which is caught from our local sea, however it is not found all year round.
 - i. Discuss the nutritive value of this type of fish. (2)
 - ii. Suggest **FOUR** healthy and appetising ways of how this fish can be cooked. (2)
 - iii. Describe **TWO** options of what can be done with mackerel bought in bulk when it is in season. (2)
 - iv. When mackerel is not in season, one may also consume the canned variety. Comment on the nutritional value of canned mackerel compared to fresh mackerel. (2)
- (Total: 20 marks)**
4. Being physically active on a regular basis creates certain dietary demands on the body.
- a. Give **TWO** reasons (apart from dehydration) why an adequate consumption of water is vital during and after physical activity. (2)
 - b. List **FOUR** symptoms which can indicate that a person is dehydrated. (2)
 - c. Suggest **FOUR** ways how a person who does not like water can increase its consumption throughout the day. (4)
 - d. Name **FIVE** important minerals that should be consumed daily in the diet by a physically active person, and give reasons for your answer. (5)
 - e. Identify **THREE** other non-dietary measures that a physically active person should take to ensure maximum performance and avoid injuries. (3)
 - f. For **EACH** of the following groups of people, outline **FOUR** simple ways how they can become active throughout the day, even though they lead a sedentary lifestyle:
 - i. teenage students; (2)
 - ii. middle-aged persons working in an office. (2)

(Total: 20 marks)

5. The document titled *Diabetes: A National Public Health Priority. Proposal for a National Strategy for Diabetes, 2015-2020*, states that “Diabetes is an important cause of morbidity in Malta with around 10 per cent of the population above 18 years estimated to be living with this condition” (2014, p. 13).

- a. Define and give the cause of Type 1 diabetes. (1, 2)
- b. List **FOUR** common symptoms which may indicate that a person could be suffering from diabetes and suggest what the person should do to confirm s/he is suffering from this condition. (2, 1)
- c. Outline **FOUR** ways how being diagnosed with Type 1 diabetes could affect the patient and one’s family. (4)
- d. Hypertension is another very common disease in Malta.
 - i. Define hypertension, and explain the difference between systolic and diastolic readings. (1,1)
 - ii. Plan a day’s menu for a person who suffers from hypertension, giving reasons for your choices. The menu should include breakfast, lunch/ dinner, snacks and drinks. (6)
 - iii. Apart from not adding salt to food during cooking and eating, suggest **FOUR** other ways how to reduce the salt/sodium content of meals. (2)

(Total: 20 marks)

6. Potatoes are considered both as a cash crop and a staple food in Malta.

- a. Outline the nutritive value of potatoes. (4)
- b. Explain why potatoes cannot be consumed raw and give the scientific principles underlining the cooking of potatoes. (1, 2)
- c. Outline scientific justifications for the following statements:
 - i. Sweet potatoes are healthier than normal potatoes. (1)
 - ii. When frying potatoes, place the cooked tuber on absorbent paper. (1)
 - iii. Sprinkle fennel seeds on baked potatoes. (1)
 - iv. Do not bake frozen potato chips unless the package states they can be oven baked. (1)
 - v. Green potatoes should not be consumed and any eye-sprouting should be removed. (1)
- d. Outline **THREE** factors to consider when purchasing and storing potatoes, and when preparing them for various dishes. (1, 1, 1)
- e. A group of parent volunteers are organising a Carnival party for young children. Suggest **TWO** practical, fun and nutritious dishes with potatoes as a main ingredient. Outline the nutritive properties of **EACH** dish mentioned. (1, 4)

(Total: 20 marks)