



SUBJECT: **Home Economics & Human Ecology**
DATE: 6th September 2018
TIME: 4:00 p.m. to 7:05 p.m.

SECTION A

Answer ALL questions

1. a) Name **TWO** types of bacteria that could cause foodborne illness. (1)
b) Identify **TWO** common symptoms of food poisoning. (1)
c) Sushi, a Japanese dish consisting of small balls or rolls of vinegar-flavoured cold rice served with a garnish of vegetables, egg, or raw seafood, is becoming increasingly popular in Malta. Outline **FOUR** precautions that need to be followed during food preparation and/or serving, to ensure that this food is safe for human consumption. (4)
2. a) Explain the importance of having an adequate daily intake of protein in the diet. (2)
b) Describe **ONE** combination of complementary protein. (1)
3. Outline **TWO** health benefits of consuming milk and dairy products as part of a balanced diet for the following groups:
a) young children; (2)
b) elderly people. (2)
4. Outline **ONE** social and **ONE** economic benefit of giving free milk to children at school. (2)
5. Legumes and wholegrain cereals are low-glycaemic index foods. Why should these products be consumed by individuals:
a) on a weight loss diet; (1)
b) to prevent diverticular disease. (1)
6. a) Name **TWO** water-soluble vitamins, and give a reason why these vitamins need to be consumed daily. (1, 1)
b) Describe **TWO** precautions that need to be taken to prevent the loss of these vitamins during food preparation. (2)
7. Explain the meaning/purpose of **EACH** of the following labels for consumers:
a) energy labels on electronic appliances; (2)
b) care labels on garments; (2)
c) CE labels on toys. (2)
8. Energy requirements change throughout the lifecycle. Outline **FOUR** factors that determine the energy requirements of an individual. (2)
9. Outline **TWO** health benefits of omega-3 and omega-6 fatty acids. Give **TWO** examples of food products that are rich in these lipids. (2, 1)

10. List **FOUR** ways how an environment-friendly student can make use of paper. (4)
11. a) Give **TWO** disadvantages of online shopping over in-store shopping when choosing kitchen appliances. (2)
- b) Give **TWO** advantages of obtaining information from friends or relatives by word of mouth over printed marketing resources. (2)

(Total: 40 marks)

SECTION B

Answer ANY THREE questions

1. a) List **TWO** differences between fats and oils, and give the calorific value of one gram of fat. (2, 1)
- b) Outline **THREE** vital roles of lipids in the body. (3)
- c) Define the terms saturated and unsaturated fatty acids. Identify **ONE** main difference in the chemical structure of a saturated and an unsaturated fatty acid. (2, 1)
- d) Discuss **TWO** health benefits of unsaturated fatty acids in the diet. (2)
- e) Name **TWO** unsaturated fatty acids. (1)
- f) Explain the scientific principles underlining **EACH** of the following statements related to the consumption of lipids:
- i. Hydrogenated fats should be avoided in the diet; (1)
 - ii. Do not reuse cooking fat; (1)
 - iii. Soluble fibre reduces low-density lipoprotein cholesterol in the blood. (1)
- g) Suggest **FOUR** strategies how consumers can lower their intake of saturated fats when following a Mediterranean diet. (4)
- h) Give **ONE** reason why health professionals consider regular physical exercise as a heart-healthy habit. (1)

(Total: 20 marks)

2. a) Outline **TWO** benefits of consuming fruit and vegetables for persons who suffer from constipation. Name and give the function of **TWO** vitamins and **TWO** minerals that fruit and vegetables may contain. (2, 1, 2, 1, 2)
- b) Describe **THREE** ways how a young child who does not like fruit and vegetables can be encouraged by his/her parents to consume fruits and vegetables. (3)
- c) Locally-grown and imported fruits and vegetables are available in various retail outlets. Discuss **ONE** economic, **ONE** environmental and **ONE** health benefit of promoting local produce when compared with imported produce. (1, 1, 1)
- d) State **TWO** advantages of consuming organic food from a consumer's point of view. Name **TWO** products that are grown organically in Malta. (2, 1)

- e) State **TWO** health-related drawbacks of genetically modified foodstuff. Name **TWO** examples of food that could be labelled as genetically modified and is available in a local supermarket. (2, 1)

(Total: 20 marks)

3. Managing financial resources wisely is essential for individuals' and families' peace of mind.
- a) Define the term budgeting. Discuss the implication if a parent draws a:
- i. well-planned budget;
 - ii. badly planned budget. (1, 1, 1)
- b) Outline **TWO** advantages of saving money. (2)
- c) Identify **FOUR** strategies that a one-parent family with two teenagers can adopt to cut unnecessary expenses. (4)
- d) When purchasing clothes, one could pay in cash or by a debit card. State **TWO** advantages and **TWO** disadvantages of each method of payment. (2, 2, 2, 2)
- e) Some consumers use credit cards for their purchases. Outline **TWO** negative implications if consumers would not settle any debt within a short period of time. (2)
- f) Suggest **ONE** strategy that should be observed by consumers to effect online transactions securely. (1)

(Total: 20 marks)

4. An elderly woman has recently moved to a residential home for the elderly.
- a) Outline **TWO** advantages and **TWO** disadvantages of this decision for:
- i. the elderly woman; (2, 2)
 - ii. her son, who is a single-parent with two young children. (2, 2)
- b) As Valletta is hosting the title of European Capital of Culture 2018, suggest **TWO** activities that this family could organise to spend some quality time together. (2)
Discuss how such activities could help:
- i. the grandmother, from a social perspective; (1)
 - ii. the children, from cultural perspective; (1)
 - iii. the parent, from an emotional perspective. (1)
- c) The grandmother is involved in voluntary work. She donates the items she creates from recycled fabric to persons in need. Discuss **ONE** benefit of such initiative:
- i. for the elderly woman; (1)
 - ii. for the community. (1)
- d) An elderly woman suffers from Type 2 diabetes. Give **THREE** dietary recommendations and **TWO** non-dietary suggestions that should be followed in order to control the chronic condition. (3, 2)

(Total: 20 marks)