



SUBJECT: **Home Economics & Human Ecology**
DATE: 12th October 2021
TIME: 4:00 p.m. to 7:05 p.m.

SECTION A

Answer ALL questions.

1. Outline **TWO** differences between water-soluble and fat-soluble vitamins and give **TWO** examples for **each** vitamin group. (2, 2)
2. Fat is essential in the human diet. Outline **THREE** functions of this macronutrient in the diet. (3)
3. Explain the term fad diets and outline **THREE** common features of different fad diets. (1, 3)
4. Explain what the abbreviation BMI stands for and its computation. Explain the **FOUR** BMI ranges which determine the health status of adult individuals. (1, 1, 4)
5. Water is vital for life. Outline **THREE** functions of water in the body and **TWO** symptoms of dehydration. (3, 1)
6. Flexi-time and job-sharing are two family-friendly work incentives. Explain how **each** of these two incentives work and outline **TWO** benefits of these incentives for the nation. (2, 2)
7. Outline **FOUR** measures that an individual should take to ensure safe and secure online shopping. (4)
8. Explain which mineral, when consumed in excess, may cause hypertension. Outline **THREE** dietary and **TWO** non-dietary measures that can be taken to reduce the prevalence of hypertension. (1, 3, 2)
9. Justify the need of a balanced diet by all. Outline and describe **FOUR** factors that contribute to different dietary needs by different individual groups. (1, 4)

(Total: 40 marks)

Please turn the page.

SECTION B

Answer ANY THREE questions.

1. Waste management is a global issue. Locally, various initiatives were introduced to make the most of the solid and liquid waste generated. These initiatives can only be successful if the general public is educated and empowered to manage their waste wisely.
- a) Define the terms organic and recyclable waste and give **TWO** examples of **each**. (2, 2)
 - b) Outline the function of **each** of the following waste management services and list **TWO** types of waste that can be deposited in each.
 - i. bring-in site;
 - ii. civic amenity site;
 - iii. bulky refuse collection. (2, 2, 2)
 - c) Textile products may also end up as waste.
 - i. List **TWO** ways how a family can discard unwanted textile garments. (2)
 - ii. Give **FOUR** examples how textile garments can be reused in a household. (4)
 - d) Explain the following statements and give an appropriate disposal alternative:
 - i. Cooking fat should not be thrown down the drain.
 - ii. Batteries discarded with mixed waste can be hazardous.
 - iii. Unused medicines should not be flushed down the toilet.
 - iv. Empty glass bottles are to be taken out for waste collection in a rigid container. (4)
- (Total: 20 marks)**

2. A group of young people are planning a barbeque. They are opting to have poultry and pork cutlets as their main ingredients.
- a) Outline the main method of cooking when barbequing, explaining how the food is cooked. (1)
 - b) Outline **TWO** considerations that the food preparer should note when preparing meat for barbequing. (1)
 - c) List **TWO** measures to be considered to ensure food safety when:
 - i. transporting food to the barbeque area;
 - ii. preparing and cooking the food;
 - iii. serving the food. (2, 2, 2)
 - d) Name **TWO** micro-organisms that can potentially cause food poisoning in poultry and pork and outline **TWO** symptoms for **each**. (2, 2)
 - e) The young people organising the barbeque are very eco-conscious and plan not to use single-use plastic items. Describe **FOUR** practical measures that can be followed during the barbeque to fulfil this wish. (4)
 - f) One of the young people is a vegan. List **FOUR** meat alternatives dishes, high in protein, that this person can barbeque. Underline the nutritional value of your food choice. (4)
- (Total: 20 marks)**

3. Research has shown that convenience is one of the main factors which influences working mothers when they are choosing which foods to provide for their family.

a) Outline **THREE** different strategies a working mother could adopt to reduce stress and save time during:

- i. food acquisition; (3)
- ii. food storage; (3)
- iii. food preparation; (3)
- iv. food consumption by the family. (3)

b) A working mother has an 8-year-old child who is overweight. Suggest **ONE** breakfast menu suitable for her child which she can prepare before leaving the house ahead of the rest of the family. Clearly indicate the nutritive value of the suggested breakfast. (2, 2)

c) This working mother also has elderly parents who live in their own home. Outline **TWO** ways how the mother can assist her elderly parents without impinging on their independence. (2)

d) Suggest **TWO** ways how the 8-year-old child can help the working mother in the home so that he will contribute to family living and learn life-skills from such activities. (2)

(Total: 20 marks)

4. A new local milk product fortified with Vitamin D was recently introduced on the local market.

a) Outline the nutritional importance of dairy products for:

- i. a growing toddler;
- ii. an athlete;
- iii. an elderly woman. (3)

b) Highlight **THREE** functions of Vitamin D in the body and outline **TWO** deficiency symptoms related to lack of this vitamin. (3, 1)

c) List **FOUR** dietary sources of Vitamin D that come from animal sources and **TWO** that come from plant sources. (2, 1)

d) Vitamin D is also referred to as the 'sunshine vitamin'. Explain this statement and outline how best humans can obtain the maximum intake of this natural vitamin source. (1, 1)

e) Yoghurt is a secondary milk product.

- i. Outline the function of micro-organisms in yoghurt-making. (2)
- ii. List **TWO** health benefits of consuming yoghurt on a regular basis. (2)

f) Explain **FOUR** of the following statements:

- i. A person who is lactose intolerant should avoid milk but can consume yoghurt.
- ii. U.H.T. milk can safely be stored in a food cupboard at room temperature if not opened.
- iii. Milk is considered as the perfect food.
- iv. Vitamin D is a fat-soluble vitamin.
- v. Excess intakes of Vitamin D over a long period of time can be dangerous to health. (4)

(Total: 20 marks)