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FOOD & NUTRITION**0648/12**

Paper 1 Theory

May/June 2025**2 hours**

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS

- Section A: answer **all** questions.
- Section B: answer **all** questions.
- Section C: answer **one** question.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.

INFORMATION

- The total mark for this paper is 100.
- The number of marks for each question or part question is shown in brackets [].

This document has **12** pages.



Section A

Answer **all** questions.

You are advised to spend no longer than 45 minutes on Section A.

- 1 State the term used to describe the food that is normally eaten every day.

..... [1]

- 2 Protein is a nutrient essential to life.

- (a) Explain why some proteins have a higher biological value (HBV) than others.

.....
.....
.....
.....
..... [3]

- (b) (i) Name **two** different animal foods that are a source of HBV protein.

1
2 [2]

- (ii) Name **three** different plant foods that are a source of HBV protein.

1
2
3 [3]

- (c) Young children are very active and require a good supply of protein in their diet to provide energy.

Explain **one** other reason why young children require a good supply of protein in their diet.

.....
..... [2]

[Total: 10]





3 Monosaccharides are carbohydrates that provide the body with energy.

(a) Name the monosaccharide that should be eaten to give an immediate release of energy.

..... [1]

(b) Name **two** enzymes involved in the digestion of carbohydrates.

1

2 [2]

[Total: 3]

4 Fats and oils are classified into three groups. Saturated fat is one group.

(a) Name the **two** other groups of fats and oils.

1

2 [2]

(b) Identify **four** health issues that could result from a diet high in saturated fat.

1

2

3

4 [4]

[Total: 6]





5 Vitamin B₁ is also known as thiamin.

(a) State the name of vitamin B₁₂.

..... [1]

(b) State **three** functions of vitamin B₁₂ in the body.

1

2

3

[3]

(c) Explain why some vegans may suffer from a deficiency of vitamin B₁₂.

.....

.....

..... [2]

[Total: 6]

6 Minerals are essential nutrients to include in a balanced diet.

(a) State **four** different reasons why it is important to include calcium in the diet.

1

2

3

4

[4]

(b) A lack of minerals in the diet can lead to deficiency diseases.

(i) Name the deficiency disease caused by a poor supply of iron.

..... [1]

(ii) Name the deficiency disease caused by a poor supply of iodide.

..... [1]





(c) Name **four** different foods that are a good source of phosphorus.

- 1
- 2
- 3
- 4 [4]

(d) Explain why people who have a high-sodium, low-potassium diet have a high risk of hypertension.

-
-
-
-
-
-
-
-
- [4]

[Total: 14]





Section B

Answer **all** questions.

- 7 A recipe for gingerbread uses the following ingredients.

250 g plain flour
 1 tsp bicarbonate of soda
 1½ tsp ground ginger
 100 g margarine
 50 g brown sugar
 150 g syrup
 2 eggs
 2½ ml milk

- (a) Bicarbonate of soda is a chemical raising agent.

- (i) Name the gas produced when using bicarbonate of soda.

..... [1]

- (ii) Suggest **three** guidelines for storing bicarbonate of soda in the home.

1

2

3

[3]

- (b) Describe how to make the gingerbread using the melting method.

.....

.....

.....

.....

.....

.....

.....

..... [5]



(c) Sometimes faults occur when cakes are baked.

Give **two** different reasons for each of the following faults in a baked gingerbread.

(i) There are little air holes on the surface of the baked cake.

1

2 [2]

(ii) The cake has sunk in the middle.

1

2 [2]

[Total: 13]

8 Deep frying is a popular method of cooking potatoes.

(a) Name **two** kinds of oils suitable to use for deep frying.

1

2 [2]

(b) State **two** different effects of deep frying on the nutritional value of potatoes.

1

2 [2]

(c) Sensory evaluation is carried out on the deep-fried potatoes.

State **three** words to describe the texture of deep-fried potatoes.

1

2

3 [3]

[Total: 7]





9 Milk and cheese are dairy foods.

(a) Name **three** other dairy foods.

- 1
- 2
- 3 [3]

(b) State **one** reason why some types of cheese are **not** suitable for lacto-vegetarians.

..... [1]

(c) Mould can often be found on foods such as cheese.

Name **two** different foods that mould commonly grows on.

- 1
- 2 [2]

(d) Describe how cheese should be stored in the home to minimise food spoilage.

.....

.....

.....

..... [3]

(e) Cheese is often used as a filling for sandwiches.

Explain why a person who is lactose intolerant should **not** eat a cheese sandwich.

.....

.....

.....

..... [3]

[Total: 12]





10 One reason for packaging food is to protect it from chemical contamination.

(a) Describe **four** other reasons for protecting food with packaging.

- 1
- 2
- 3
- 4

[4]

(b) Metal is often used as a type of packaging material in the food industry.

State **four** disadvantages of using metal as a packaging material.

- 1
- 2
- 3
- 4

[4]

[Total: 8]

11 Describe **five** advantages of using paint as a wall covering in a kitchen.

- 1
- 2
- 3
- 4
- 5

[5]



12 Obesity is a common health issue often caused by an incorrect diet. Discuss ways to prevent obesity when planning family meals.

13 Use your knowledge of nutrition and meal planning to discuss the vitamin requirements of a pregnant lacto-vegetarian and her developing baby. [15]

[illegible]

[illegible]

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