

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS**  
**A2 GCE**  
**G004/01**  
**HOME ECONOMICS**  
**Food, Nutrition and Health**  
**Nutrition and Food Production**

**THURSDAY 20 JUNE 2013: Afternoon**  
**DURATION: 1 hour 30 minutes**  
**plus your additional time allowance**

**MODIFIED ENLARGED**

<b>Candidate forename</b>						<b>Candidate surname</b>				
<b>Centre number</b>						<b>Candidate number</b>				

**Candidates answer on the Question Paper.**

**OCR SUPPLIED MATERIALS:**

**None**

**OTHER MATERIALS REQUIRED:**

**None**

**READ INSTRUCTIONS OVERLEAF**

## **INSTRUCTIONS TO CANDIDATES**

- Write your name, centre number and candidate number in the boxes on the first page. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- There are two sections in this paper.

### **SECTION A 25 MARKS**

Answer question 1.

### **SECTION B 50 MARKS**

Answer **TWO** questions only.

## **INFORMATION FOR CANDIDATES**

- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is **75**.
- You will be awarded marks for the quality of your written communication in your answers to the questions in Section B.
- Any blank pages are indicated.

# **BLANK PAGE**

## **SECTION A**

**Answer ALL PARTS of question 1.**

**1 (a) (i) State TWO different good sources of dietary calcium.**

**1** \_\_\_\_\_

**2** \_\_\_\_\_

**[2]**

**(ii) Give THREE functions of calcium in the body.**

**1** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**3** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**[3]**

**(b) (i) Name ONE good food source of vitamin B12.**

[1]

**(ii) Identify ONE group who may suffer a deficiency of vitamin B12.**

[1]

**(iii) State TWO effects of a lack of vitamin B12 on the body.**

**1** \_\_\_\_\_

\_\_\_\_\_

**2** \_\_\_\_\_

\_\_\_\_\_

[2]

**(c) Explain the function of each of the following food additives in food production.**

**(i) Emulsifiers**

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**[2]**

**(ii) Nutritional additives**

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**[2]**

**(iii) Antioxidants**

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**[2]**

**(d) Explain TWO behaviour changes that will occur during the baking of a cake.**

1 \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2 \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**[4]**

**(e) Explain how an energy imbalance can contribute to obesity.**

[6]

## **SECTION B**

**Answer TWO questions ONLY.**

**The quality of written communication will be assessed in your answers to the questions in Section B.**

- 2 Explain the nutritional value, choice and use of fruit and vegetables in food preparation and cooking. [25]**
  
- 3 Different packaging materials are used by the food industry.  
Explain the benefits and limitations of the different packaging materials for the manufacturer, retailer and consumer. [25]**
  
- 4 Explain how to meet the dietary and nutritional needs of adolescents and adults. [25]**































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