

351/02

DESIGN AND TECHNOLOGY AS

FOOD TECHNOLOGY DT1

A.M. TUESDAY, 5 June 2007

(2½ Hours)

ADDITIONAL MATERIALS

In addition to this examination paper, you will need a 12 page answer book.

INSTRUCTIONS TO CANDIDATES

Answer **six** questions from Section A.

Answer **one** question from Section B.

INFORMATION FOR CANDIDATES

When and where appropriate, answers should be amplified and illustrated with sketches and/or diagrams.

Section A answers should be no more than half a page. This section is designed to demonstrate your **breadth** of knowledge in Food Technology.

Your **Section B** answer should be substantial and demonstrate your **depth** of knowledge in Food Technology.

You are reminded of the necessity for good English and orderly presentation in your answers.

SECTION A

*Answer **six** questions from this section.*

*The maximum length of each answer should be no more than about 150 words.
This section is designed to demonstrate your **breadth** of knowledge in Food Technology.*

Each question carries 8 marks.

1. (a) State **two** nutritional functions of fats within the body. [2]
 (b) Explain why consumers may try to change their consumption of fats away from saturated fats. [6]

2. When trialling the shortness, colour and flavour of the pastry used in an apple pie product, it is found to be unsatisfactory.
 Suggest **four** changes to improve the pastry and, for **each**, state what effect you would expect the change to have. 4 × [2]

3. Describe the role of **two** members of a food product development team. 2 × [4]

4. Food products are manufactured by different production systems. Explain why certain food products are suitable for:
 (a) batch production; [4]
 (b) mass production. [4]

5. The launch of a new food product may determine its success or failure.
 Evaluate **four** possible strategies that a food producer could use. 4 × [2]

6. (a) Explain what *standardised food components* are. [2]
 (b) Outline **three** reasons why manufacturers use standardised food components. 3 × [2]

7. Describe the influence that celebrity chefs have on the development of new food products. [8]
8. Discuss the advantages and disadvantages of using plastics for packaging food products. [8]
9. (a) Define the term *Just in Time (JIT)* in food manufacturing. [2]
(b) List **three** benefits of JIT to the food manufacturer. $3 \times [2]$
10. *Sensory evaluation* and *nutritional analysis* are used by food product designers.
Choose **one** of these and describe how it is:
- (a) carried out; [4]
(b) used to improve food products. [4]

SECTION B

Answer **one** question from this section.

Your answer should be substantial and show the **depth** of your knowledge in Food Technology.

Each question carries 22 marks, 2 of which are for clarity of communication.

- 11.** Eggs have a number of properties which make them useful to food manufacturers.

Describe in detail **two** of these properties and explain how these are used in the manufacture of named food products. 2 × [10]

Clarity of communication. [2]

- 12.** Social, moral, political and ethical issues all affect the food we eat.

Discuss this statement. [22]

- 13.** The applications of ICT have a significant effect on traditional food manufacturing processes. Discuss the advantages and disadvantages the use of ICT has had on food manufacturing processes. [22]