



**GCE A level**

1113/02

**DESIGN AND TECHNOLOGY – DT3**  
**Food Technology**

A.M. TUESDAY, 3 June 2014

2 hours 30 minutes

**ADDITIONAL MATERIALS**

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

**INSTRUCTIONS TO CANDIDATES**

Use black ink or black ball-point pen.

Answer **three** questions from Section A.

Answer **three** questions from Section B.

Answer **two** questions from Section C.

**INFORMATION FOR CANDIDATES**

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

**Section A** and **Section B** answers are designed to demonstrate your **breadth** of knowledge in Food Technology.

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

Candidates are reminded of the necessity for good English and orderly presentation in their answers.

**SECTION A**

Answer **three** questions from this section.

This section is designed to demonstrate your **breadth** of knowledge in Food Technology.

**Each question carries 8 marks.**

1. Outline reasons why consumers may choose to buy food products which are sourced or produced locally. [8]
  
2. Describe how feedback is used within Computer Aided Manufacture (CAM), using specific examples. [8]
  
3. Antioxidants, preservatives and emulsifiers are sometimes used in food products.  
Explain how any **two** of these are used within named food products. 2 × [4]
  
4. Describe what you understand by the term 'technology push' and identify **two** such food products and their innovative 'technology push' features. [8]
  
5. Describe the incremental improvements which have been made to **one** named food product of your choice, explaining how these changes have improved the product. [8]

**SECTION B**

Answer **three** questions from this section.

This section is designed to demonstrate your **breadth** of knowledge in Food Technology.

**Each question carries 8 marks.**

6. (a) Explain the functions of **two** named minerals in the diet. 2 × [2]  
(b) Outline **two** reasons why some orange juice is fortified with calcium. 2 × [2]
7. Explain the purpose of development work within a design process. [8]
8. Legislation requires that certain information is included on a food packaging label.  
State **four** pieces of information which must be included by law on a food label and for **each** give a reason why it needs to be included. 4 × [2]
9. Outline how the main features of Registered Design, as prescribed by the Intellectual Property Office, benefit the creator of the design. [8]
10. It is critical that food manufacturers follow safe working practices.  
Identify **four** possible hazards during the storage and distribution of food products and outline how **each** of these hazards could be controlled. 4 × [2]

**SECTION C**

*Answer **two** questions from this section.*

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

***Each question carries 26 marks.***

11. Discuss the work and food style of any **two** restaurateurs, chefs or food writers from the early 1970s to the present day and evaluate the impact **each** has had on the food we eat and the food choices we make. [26]
  
12. Describe in detail the properties and characteristics of **two** specific food materials used in any named food product of your choice and explain the benefits of using **each** of these materials within the food product. [26]
  
13. Food technologists will often have a 'toolbox' containing various strategies for creative thinking, such as brainstorming.  
  
Compare, in detail, **two** other creative thinking strategies with which you are familiar. [26]
  
14. Discuss how food technologists make use of DRVs (Dietary Reference Values) and other dietary guidelines when designing named food products for particular target markets. [26]
  
15. Discuss ways in which the four Ps are instrumental in achieving maximum sales for food products. [26]

**END OF PAPER**