



BOARD OF STUDIES
NEW SOUTH WALES

2006

HIGHER SCHOOL CERTIFICATE
EXAMINATION

Food Technology

General Instructions

- Reading time – 5 minutes
- Working time – 3 hours
- Write using black or blue pen
- Write your Centre Number and Student Number at the top of pages 5, 7, 9 and 11 or 13

Total marks – 100

Section I Pages 2–4

10 marks

- Attempt Questions 1–10
- Allow about 15 minutes for this section

Section II Pages 5–14

55 marks

This section has two parts, Part A and Part B

- Allow about 1 hour and 35 minutes for this section

Part A – 45 marks

- Attempt Questions 11–13

Part B – 10 marks

- Attempt either Question 14 or Question 15

Section III Page 15

20 marks

- Attempt either Question 16 or Question 17
- Allow about 40 minutes for this section

Section IV Page 16

15 marks

- Attempt ONE question from Questions 18–21
- Allow about 30 minutes for this section

- 1** Which of the following is not a sector of the Australian food industry?
 - (A) Food retail
 - (B) Food marketing
 - (C) Agriculture and fisheries
 - (D) Food processing and manufacturing

- 2** Which feature of a food product is monitored by critical control points in a HACCP system?
 - (A) Size
 - (B) Safety
 - (C) Nutrition
 - (D) Consistency

- 3** How does protection of the ecological environment impact on food product development?
 - (A) Decrease in recycling
 - (B) Increase in use of pesticides
 - (C) Decrease in food production cost
 - (D) Increase in use of biodegradable packaging

- 4** Which product is preserved using modified atmosphere packaging?
 - (A) Cornflakes
 - (B) Canned tomatoes
 - (C) Pre-packaged salads
 - (D) Fresh flavoured milk

- 5** What is the major impact of research and development on the Australian food industry?
 - (A) Increased range of foods available
 - (B) Reduced packaging costs for consumers
 - (C) Reduced food imports in the marketplace
 - (D) Increased nutrient content of processed food

- 6** What is the most significant impact of the Trade Practices Act on the Australian food industry?
- (A) Introduction of tariffs on imports
 - (B) Prevention of restrictive trade practices
 - (C) Providing export certification for agricultural produce
 - (D) Environmental Protection Authority monitoring of factory emissions
- 7** What has led to soup being packaged and sold in a microwaveable cup?
- (A) Company image
 - (B) Market concerns
 - (C) Specialised application
 - (D) Technological development
- 8** What is the purpose of the nutritional panel on a food label?
- (A) To show the additives included
 - (B) To inform consumers of nutritional content
 - (C) To show quantity of ingredients in the product
 - (D) To inform consumers of nutrient function in the body
- 9** What is the major cause of spoilage in fruits and vegetables?
- (A) Enzymatic changes
 - (B) Exposure to light
 - (C) Purchasing out of season
 - (D) Refrigerated storage
- 10** During which step is a break-even point decided when developing a food product?
- (A) Idea screening
 - (B) Primary research
 - (C) Feasibility study
 - (D) Product specification

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Centre Number

Section II

55 marks

Allow about 1 hour and 35 minutes for this section

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Student Number

Part A – 45 marks

Attempt Questions 11–13

Answer the questions in the spaces provided.

Marks

Question 11 — The Australian Food Industry (15 marks)

Name a food organisation that you have studied.

Name of food organisation

- (a) Identify TWO quality assurance procedures used by this organisation. **2**

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- (b) Describe how the identified quality assurance procedures for this organisation ensure a safe food product. **4**

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Question 11 continues on page 6

Question 11 (continued)

- (c) Discuss the impact of consumer influences on the organisation identified, using relevant examples. **6**

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- (d) Explain how the identified organisation has responded to consumer influences, using relevant examples. **3**

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End of Question 11

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Centre Number

Section II – Part A (continued)

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Student Number

Marks

Question 12 — Food Manufacture (15 marks)

- (a) Define *food additives*. **2**

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- (b) Explain why food additives are used by food manufacturers. **3**

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Question 12 continues on page 8

Question 13 (continued)

- (c) Predict ways in which GrainCo could use the results of your SWOT analysis to develop the product. 8

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End of Question 13

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Centre Number

Section II (continued)

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Student Number

Part B – 10 marks

Attempt either Question 14 or Question 15

Answer the question in the spaces provided.

Marks

Question 14 — Contemporary Food Issues – Nutrition (10 marks)

- (a) Explain the effects of social and cultural practices on the nutritional status of the Australian population, using relevant examples. **4**

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Question 14 continues on page 12

Question 14 (continued)

- (b) Evaluate the effects of varying levels of physical activity on the nutritional status of individuals within the Australian population. **6**

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End of Question 14

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Centre Number

Section II – Part B (continued)

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Student Number

Marks

Do NOT attempt Question 15 if you have already attempted Question 14.

Question 15 — Contemporary Food Issues – Marketplace (10 marks)

- (a) Describe the key features of ecologically sustainable food production. **4**

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Question 15 continues on page 14

Question 15 (continued)

- (b) Evaluate the positive and negative impacts of ecologically sustainable food production on the food supply. **6**

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End of Question 15

Food Technology

Section III

20 marks

Attempt either Question 16 or Question 17

Allow about 40 minutes for this section

Answer the question in a writing booklet. Extra writing booklets are available.

	Marks
Question 16 — Food Manufacture (20 marks)	
(a) Discuss the impact of food manufacturing technologies on employment opportunities in Australia.	8
(b) Analyse the impact of current food packaging and waste management practices on the environment.	12

OR

Question 17 — Food Product Development (20 marks)	
(a) Explain the reasons for development of food products.	8
(b) Using examples of line extensions, analyse how food manufacturers have responded to the reasons for development of food products.	12

Please turn over

Section IV

15 marks

Attempt ONE question from Questions 18–21

Allow about 30 minutes for this section

Answer the question in a SEPARATE writing booklet. Extra writing booklets are available.

In your answer you will be assessed on how well you:

- present ideas clearly in a well-structured text
 - use appropriate terminology
 - support the argument with relevant examples
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Contemporary Food Issues – Nutrition

Question 18 (15 marks)

Discuss ways in which food manufacturers have responded to consumer demands for nutritionally modified foods, and describe how these foods have impacted on the health of the Australian community.

OR

Question 19 (15 marks)

‘Media and advertising have encouraged poor diets, leading to increased obesity levels in Australia.’

Critically discuss this statement in relation to the impact of advertising on food consumption patterns.

Contemporary Food Issues – Marketplace

Question 20 (15 marks)

Discuss the trend towards value-added convenience foods, and describe the social impacts arising from these foods for both food manufacturers and consumers.

OR

Question 21 (15 marks)

‘Ownership concentration in the food industry has maximised company profits at the expense of social, economic and ethical issues.’

Critically discuss this statement in relation to both developed and developing parts of the world.

End of paper

– 16 –