



**Victorian Certificate of Education
2004**

SUPERVISOR TO ATTACH PROCESSING LABEL HERE

STUDENT NUMBER

Figures

Words

Letter

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**FOOD AND TECHNOLOGY
Written examination**

Monday 15 November 2004

Reading time: 9.00 am to 9.15 am (15 minutes)

Writing time: 9.15 am to 10.45 am (1 hour 30 minutes)

QUESTION AND ANSWER BOOK

Structure of book

<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
9	9	100

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners and rulers.
 - Students are NOT permitted to bring into the examination room: blank sheets of paper and/or white out liquid/tape.
 - No calculator is allowed in this examination.
- Materials supplied**
- Question and answer book of 15 pages.
- Instructions**
- Write your **student number** in the space provided above on this page.
 - All written responses must be in English.

Students are NOT permitted to bring mobile phones and/or any other electronic communication devices into the examination room.

Instructions
Answer **all** questions in the spaces provided.

Question 1

The owner of a small restaurant called Jack’s Café has asked your advice about the health and safety issues that he needs to consider in his business.

- a. Identify one important health and safety practice in each of the following aspects of the business, and describe a consequence of **not** following each practice.

Storage controls _____

Food handling _____

Design of work areas _____

6 marks

The café owner uses the batch production system to make cakes and biscuits each day.

- b. Describe the main features of the batch production system.

2 marks

Total 8 marks

Question 2

Due to copyright restriction,
this material is not supplied.

The Uncle Tobys company has produced a microwavable breakfast food called Oat Temptations, that is sold in single-serve packaging. This breakfast food is high in fibre and low in fat.

Initially the company conducted market research and recognised a niche market for breakfast foods.

- a. i.** Identify a possible niche market for this product.

- ii.** Explain two reasons why this product might appeal to the niche market that you identified in part **i.**
Reason 1

Reason 2

1 + 2 = 3 marks

Next the company established a design brief, which included product ideas, considerations, constraints, and criteria for evaluation of the new product. A prototype was then developed and a trial run was undertaken.

- b.** Outline two considerations or constraints that may have existed in the design brief of this breakfast food.

Consideration or constraint 1

Consideration or constraint 2

2 marks

- c.**
 - i.** Write two criteria questions that the manufacturer could use to evaluate this new product.

Criterion 1

Criterion 2

- ii.** Give one reason why it is important for the manufacturer to undertake this evaluation.

2 + 1 = 3 marks

Finally a marketing campaign was used to launch the product.

- d.** Describe one factor that may influence the marketing of this product.

1 mark

- e.** Outline two marketing strategies that could have been used to promote this product.

Strategy 1

Strategy 2

2 marks

- f.** Identify two factors that may influence the price of this product.

Factor 1

Factor 2

2 marks

- g.** **i.** This product can be prepared in a microwave oven. Over the years the number of food products that can be microwaved has increased. Explain two social factors that have led to this increase.

Social factor 1

Social factor 2

- ii.** Identify two health and safety practices to follow when using a microwave oven.

Practice 1

Practice 2

2 + 2 = 4 marks

Total 17 marks

TURN OVER

Question 3

Eggs, milk, butter and margarine are ingredients commonly used in the preparation of food products. Select **one** of these food ingredients and answer all the following questions.

Food ingredient selected _____

- a. Identify a modified food ingredient that can be used in food preparation in place of the selected food ingredient.

Modified food ingredient _____

1 mark

- b. Describe two differences between the properties (physical, chemical or sensory) of the modified food ingredient and the original selected food ingredient.

Difference 1

Difference 2

2 marks

- c. Identify a tool that may be used when preparing a food product containing this modified food ingredient and explain why it would be used.

2 marks

- d. i. Define the term niche market.

- ii. Identify a niche market for the modified food ingredient named above.

- iii. Explain how the modified food ingredient meets the needs of the niche market.

1 + 1 + 1 = 3 marks

- e. i. Identify a food product that can be made using the modified food ingredient in place of the original selected food ingredient.

- ii. Explain why the modified food ingredient is a suitable substitute for the original selected food ingredient.

1 + 2 = 3 marks

Total 11 marks

Question 4

Acids, alkalis, starches, sugars and fats are all natural food components.

Select two of the food components listed above. Explain a role that each can play in food preparation and processing. Include an example in each of your explanations.

Food component 1 _____

Role

Food component 2 _____

Role

Total 4 marks

Question 5

An Arnott's Tim Tam biscuit wrapper is shown below.



- a. i. Identify four additional labelling requirements that need to be shown on this biscuit packet.

Requirement 1

Requirement 2

Requirement 3

Requirement 4

- ii. Identify and explain one function of the packaging of these biscuits.

4 + 2 = 6 marks

- b. Arnott's uses continuous processing to produce these biscuits. Describe the main features of continuous processing.

2 marks



Arnott's Tim Tam biscuits have been available for many years. Dick Smith Foods has recently begun producing these temptin' biscuits, which are similar to Tim Tams.

c. i. Name this type of product development.

ii. Explain one reason why Dick Smith Foods may have produced these biscuits.

1 + 1 = 2 marks



Arnott's have also produced a Chewy Choc Fudge Tim Tam.

d. i. Name this type of product development.

ii. Explain one reason why Arnott's may have produced these biscuits.

1 + 1 = 2 marks

Total 12 marks

TURN OVER

Question 6

a. i. Define genetic engineering of food.

ii. Describe two advantages of genetic engineering of food.

Advantage 1

Advantage 2

iii. Describe two disadvantages of genetic engineering of food.

Disadvantage 1

Disadvantage 2

2 + 2 + 2 = 6 marks

- b. i.** Define food irradiation.

- ii.** Describe two advantages of food irradiation.

Advantage 1

Advantage 2

- iii.** Describe two disadvantages of food irradiation.

Disadvantage 1

Disadvantage 2

2 + 2 + 2 = 6 marks

Total 12 marks

TURN OVER

Question 7

- a. Key food commodities include fruit and vegetables, milk and meat. Provide information about each of these key food commodities in the table below.

Key food commodity	Fruit and vegetables	Milk	Meat
Origin of the key food commodity			
Example of a food that results from the primary processing of the key food commodity			
Example of a food that results from the secondary processing of the key food commodity			

9 marks

- b. i. Explain one reason for the primary processing of food.

- ii. Explain one reason for the secondary processing of food.

1 + 1 = 2 marks

- c. i. Identify and explain one environmental issue that results from the primary processing of food.

- ii. Identify and explain one environmental issue that results from the secondary processing of food.

2 + 2 = 4 marks

- d. Identify and explain two health and safety issues associated with the primary and/or the secondary processing of food.

Issue 1

Issue 2

4 marks

Total 19 marks

TURN OVER

Question 8

Heating, freezing and dehydration are examples of food processing techniques that are used commercially to preserve food.

- a. Select one of the processing techniques listed above, or another processing technique that is used to preserve food.

Processing technique selected _____

Identify a food that is preserved commercially using this technique _____

1 mark

- b. Explain how this processing technique preserves the food identified in part a.

2 marks

- c. Explain two differences in the properties (physical, chemical or sensory) of the processed food in comparison with the food before it was processed.

2 marks

- d. Identify and explain two advantages to the consumer and/or manufacturer of using this processing technique to preserve the fresh food identified in part a.

Advantage 1

Advantage 2

4 marks

Total 9 marks

Question 9

Food Standards Australia New Zealand (FSANZ – formerly known as ANZFA) is the national authority responsible for developing and reviewing the Food Standards Code.

- a. Identify two aspects of food safety that are regulated by the Food Standards Code.

2 marks

- b. i. Describe two advantages of food safety regulations for consumers.

Advantage 1

Advantage 2

- ii. Describe two advantages of food safety regulations for manufacturers.

Advantage 1

Advantage 2

2 + 2 = 4 marks

- c. FSANZ has a number of other roles in food production control. Explain one other role of FSANZ.

2 marks

Total 8 marks