



BOARD OF STUDIES
NEW SOUTH WALES

2011 HSC Food Technology Marking Guidelines

Section I

Multiple-choice Answer Key

| Question | Answer |
|-----------------|---------------|
| 1 | B |
| 2 | C |
| 3 | B |
| 4 | D |
| 5 | C |
| 6 | D |
| 7 | C |
| 8 | B |
| 9 | A |
| 10 | B |
| 11 | D |
| 12 | A |
| 13 | A |
| 14 | D |
| 15 | D |
| 16 | A |
| 17 | C |
| 18 | C |
| 19 | D |
| 20 | C |

Section II

Question 21

| Criteria | Marks |
|---|-------|
| <ul style="list-style-type: none">Provides valid meaning of the term <i>ecologically sustainable food production</i> OR | 2 |
| <ul style="list-style-type: none">Provides a range of <i>ecologically sustainable food production</i> examples | |
| <ul style="list-style-type: none">Provides general information on <i>ecologically sustainable food production</i> | 1 |

Question 21 (b)

| Criteria | Marks |
|---|-------|
| <ul style="list-style-type: none">Identifies issues and provides points for and/or against the use of genetically modified crops in food production | 4-5 |
| <ul style="list-style-type: none">Sketches in general terms the use of genetically modified crops in food production AND/OR | 2-3 |
| <ul style="list-style-type: none">Identifies a range of issues in the use of genetically modified crops in food production | |
| <ul style="list-style-type: none">Provides general information on genetically modified crops and/or genetically modified foods | 1 |

Question 22 (a)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none">Names THREE processes that transform raw material wheat into flour | 2 |
| <ul style="list-style-type: none">Names TWO processes that transform raw material wheat into flour | 1 |

Question 22 (b)

| Criteria | Marks |
|---|-------|
| <ul style="list-style-type: none">Provides characteristics and features of a process used to transform wheat into flour | 2 |
| <ul style="list-style-type: none">Provides general information on transforming wheat into flour | 1 |

Question 23

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Makes a relationship evident between government legislation and policies and a range of ways they affect the Australian food industry | 7–8 |
| <ul style="list-style-type: none"> Provides characteristics and features of government legislation and policies. AND/OR <ul style="list-style-type: none"> Makes a relationship between government legislation and policy and the affect on the Australian food industry | 5–6 |
| <ul style="list-style-type: none"> Sketches in general terms government legislation AND/OR policies that affect the Australian food industry OR <ul style="list-style-type: none"> Provides characteristics and features of a piece of government legislation or policy. | 3–4 |
| <ul style="list-style-type: none"> Provides some information on a government policy or a piece of legislation that is linked to the Australian food industry | 1–2 |

Question 24 (a)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Provides characteristics of the primary function of each additive to foods, using a relevant example | 2 |
| <ul style="list-style-type: none"> Identifies a function and/or gives a relevant example | 1 |

Question 24 (b)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Provides reasons why an additive code numbering system is an advantage in food labelling | 2 |
| <ul style="list-style-type: none"> Provides an advantage AND/OR general information on the additive code numbering system | 1 |

Question 25 (a)

| Criteria | Marks |
|---|-------|
| <ul style="list-style-type: none"> Makes evident the need for the production of a prototype during the development of a food product | 2 |
| <ul style="list-style-type: none"> Provides general information about the production of a food prototype | 1 |

Question 25 (b)

| Criteria | Marks |
|--|-------|
| • Examines a range of product prototype testing | 4 |
| • Provides characteristics and features of product prototype testing | 3 |
| • Identifies methods of testing product prototypes | 2 |
| • Provides general information about testing product prototypes | 1 |

Question 26 (a)

| Criteria | Marks |
|---|-------|
| • Correctly names THREE external factors with relevant examples | 3 |
| • Correctly names TWO external factors with relevant examples OR • Correctly names THREE external factors | 2 |
| • Correctly names external factor/s AND/OR example OR • Correctly names THREE external factors, no examples | 1 |

Question 26 (b)

| Criteria | Marks |
|--|-------|
| • Relates cause and effect of a range of ways the food industry adjusts its pricing structures in response to changes in the economy | 5–6 |
| • Provides characteristics and features of way/s in which the food industry adjusts its pricing structures in response to changes in the economy | 3–4 |
| • Provides general information on pricing structures AND/OR the economy | 1–2 |

Question 27 (a)

| Criteria | Marks |
|---|-------|
| • Recognises and names a significant health concern associated with/for selected group and provides a reason | 2 |
| • Recognises and names a significant health concern associated with/for selected group OR • Provides a reason/general information on health concerns for the selected group | 1 |

Question 27 (b)

| Criteria | Marks |
|--|--------------|
| • Puts forward a range of changes to dietary intake that would address the nutritional needs of the selected group and makes relationship/s between dietary intake and the nutritional needs of this group | 3–4 |
| • Puts forward change/s to dietary intake that would address the nutritional needs of the selected group and provides characteristics and features | 2 |
| • Provides general information on meals or diets | 1 |

Question 27 (c)

| Criteria | Marks |
|--|--------------|
| • Puts forward a strategy to promote optimum health through good nutrition for the selected group. Supports/links strategy to optimum health | 3–4 |
| • Provides characteristics and features of a strategy promoting optimum health through good nutrition for a selected group | 2 |
| • Provides general information on a strategy | 1 |

Section III

Question 28 (a)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Provides causes for deterioration and spoilage in fruit Links cause to spoilage Uses appropriate terminology and relevant examples | 3 |
| <ul style="list-style-type: none"> Indicates some causes of deterioration and spoilage in fruit AND/OR <ul style="list-style-type: none"> Gives examples | 2 |
| <ul style="list-style-type: none"> Provides general information on deterioration and/or spoilage in fruit | 1 |

Question 28 (b)

| Criteria | Marks |
|--|-------|
| <ul style="list-style-type: none"> Provides characteristics and features of the legislative labelling requirements for a preserved product Uses appropriate terminology | 4 |
| <ul style="list-style-type: none"> Sketches in general terms the legislative labelling requirements for a preserved product OR <ul style="list-style-type: none"> Identifies the legislative labeling requirements for a preserved product | 2-3 |
| <ul style="list-style-type: none"> Provides general information on labelling of a product | 1 |

Question 28 (c)

| Criteria | Marks |
|---|-------|
| <ul style="list-style-type: none"> Makes evident the relationship between TWO preservation processes and how they extend shelf-life of fruit Uses appropriate terminology | 7-8 |
| <ul style="list-style-type: none"> Provides characteristics and features of TWO preservation processes Uses terminology | 5-6 |
| <ul style="list-style-type: none"> Sketches in general terms TWO preservation processes OR <ul style="list-style-type: none"> Provides characteristics and features of ONE preservation process | 3-4 |
| <ul style="list-style-type: none"> Provides general information on preservation/processes and/or how shelf-life can be extended | 1 |

Section IV

Question 29

| Criteria | Marks |
|---|-------|
| <ul style="list-style-type: none">Examines in detail societal changes (ageing, lifestyle, household structures, health and diet-related issues)Addresses the extent to which food manufacturers and food product developers have responded to these changesProvides relevant examples, uses appropriate terminology in a logical, cohesive response | 13–15 |
| <ul style="list-style-type: none">Makes relationships between societal changes and the response of food manufacturers and food product developersProvides examples and uses appropriate terminology | 10–12 |
| <ul style="list-style-type: none">Provides characteristics and features of societal changes providing some links to the response of food manufacturers and food product developersProvides examples | 7–9 |
| <ul style="list-style-type: none">Sketches in general terms societal changes and/or the response of food manufacturers and food product developersProvides an example(s) | 4–6 |
| <ul style="list-style-type: none">Provides general information on societal changes and/or responses of food manufacturers and food product developers | 1–3 |

Food Technology

2011 HSC Examination Mapping Grid

Section I

| Question | Marks | Content | Syllabus outcomes |
|----------|-------|---|-------------------|
| 1 | 1 | Convenience foods | H1.3 |
| 2 | 1 | Sectors of AFI | H1.2 |
| 3 | 1 | Quality control (raw materials) | H1.1 |
| 4 | 1 | Production to achieve safe food (HACCP) | H1.1 |
| 5 | 1 | Levels of operation | H1.4 |
| 6 | 1 | Functional foods | H2.1 |
| 7 | 1 | Market research | H1.3 |
| 8 | 1 | Active non nutrients | H2.1 |
| 9 | 1 | GM foods | H1.2 |
| 10 | 1 | Environmental impact | H1.2, H1.4 |
| 11 | 1 | Society – lifestyle changes | H2.1, H1.4 |
| 12 | 1 | Company profitability | H1.3 |
| 13 | 1 | Effect of lifestyle(s) nutritional status | H2.1 |
| 14 | 1 | Production systems | H1.1 |
| 15 | 1 | Food sensitivity/ intolerance/allergies | H2.1 |
| 16 | 1 | Role of supplements | H2.1 |
| 17 | 1 | Internal factors | H1.3 |
| 18 | 1 | Fermentation | H4.2 |
| 19 | 1 | Reasoning for FPD (Tech. develop) | H1.3 |
| 20 | 1 | Sous vide | H4.2 |

Section II

| Question | Marks | Content | Syllabus outcomes |
|----------|-------|--|-------------------|
| 21 (a) | 2 | Ecologically sustainable production | H1.2 |
| 21 (b) | 5 | Genetically modified crops | H1.2 |
| 22 (a) | 2 | Processes that transform raw materials into manufactured foods (unit operations) | H1.1 |
| 22 (b) | 2 | Processes that transform raw materials into manufactured foods (unit operations) | H1.1 |
| 23 | 8 | Australian Food Industry – Policy and Legislation | H1.2 |
| 24 (a) | 4 | Role of additives in the manufacturing process | H1.1 |
| 24 (b) | 2 | Role of additives in the manufacturing process | H1.1 |
| 25 (a) | 2 | Development of prototype | H1.3 |
| 25 (b) | 4 | Testing product prototype | H1.3 |
| 26 (a) | 3 | External factors | H1.3 |
| 26 (b) | 6 | Pricing strategies | H1.3 |
| 27 (a) | 2 | Nutritional considerations for a specific group you have investigated | H3.2 |
| 27 (b) | 4 | Nutritional considerations for a specific group you have investigated | H3.2 |
| 27 (c) | 4 | Nutritional considerations for a specific group you have investigated | H3.2 |

Section III

| Question | Marks | Content | Syllabus outcomes |
|-----------------|--------------|---|--------------------------|
| 28 (a) | 3 | Causes food deterioration/spoilage (AFI/Food manufacture) | H4.2 |
| 28 (b) | 4 | Legislative requirements/labelling | H1.2 |
| 28 (c) | 8 | Preservation processes | H4.2 |

Section IV

| Question | Marks | Content | Syllabus outcomes |
|-----------------|--------------|---|--------------------------|
| 29 | 15 | Ageing population, health-diet related issues, lifestyle, household structures changing (FPD/Contemporary nutrition issues) | H1.3, H2.1, H5.1 |