2000 HSC Notes from the Examination Centre Food Technology

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Food Technology

Introduction

In 2000, 3198 candidates attempted the 2/3 Unit (Common) Paper and 363 presented for the 3 Unit (Additional) Paper.

2/3 Unit (Common) - Written examination

Section I - Multiple Choice (12 marks). Questions 1 - 12.

The following table is an item analysis of questions 1 - 12. It shows the percentage response for each of the choices. The correct response is also indicated by an asterisk (*).

Question	(A)	(B)	(C)	(D)	% Correct
1	45.15	5.12	45.91*	3.76	45.91
2	68.91*	8.78	12.86	9.35	68.91
3	2.27	64.61*	8.85	24.23	64.61
4	93.11*	2.34	4.14	0.41	93.11
5	15.07	47.96*	3.51	33.36	47.96
6	26.73	32.32	4.61	36.15*	36.15
7	8.31	47.71*	14.53	29.32	47.71
8	4.55	21.52	59.02*	14.79	59.02
9	10.58	44.77	10.24	34.31*	34.31
10	1.17	10.27	81.04*	7.52	81.04
11	8.25	19.91	57.63*	14.06	57.63
12	84.61*	5.50	0.85	8.94	84.61

Section II – Short Response Answers (48 marks) 3 questions (16 marks each)

The following table indicates the percentage of candidates who responded to each of the questions in Section II. It appeared that a number of candidates attempting question 15 or 16 might have elected to respond to a question that had not been studied in class. This was reflected in the quality of the responses at the lower end.

Question 13 (core strand - compulsory)	99%
Question 14 (core strand - compulsory)	99%
Question 15 (option strand)	46%} } 102% Some candidates attempted } both questions
Question 16 (option strand)	56% }

Candidates performance will be described as Excellent / Above Average; Average and Below Average. This report aims to describe the differences in performance of these broad groups.

Excellent / Above Average

These candidates demonstrated a thorough understanding of key terms. Terminology was accurate and reflected a sound knowledge of syllabus content. They interpreted the questions accurately and discussed detailed, relevant examples where appropriate.

Examples of these qualities include:

Question 13 - candidates outlined functions of the selected packaging materials demonstrating strong links between the properties of the material and function described. A breadth of ecological issues was considered. Evidence of knowledge of current developments in the use of packaging was demonstrated by a range of relevant examples. Legal requirements were identified and linked to specific legal bodies. Question 15 - specific reference was made to the marketing mix. A range of primary and secondary sources was listed and a clear outline of advantages and disadvantages for the consumer were described.

Question 16 - candidates avoided already popular snack foods. Their 'idea' was suitable and relevant to the target market. The steps in developing the product were related to the new food product.

Average

These responses made only limited links between examples and the question. Description / discussion was lacking. Generalisations were common.

Examples of these qualities include:

Question 14 - knowledge of the level of mechanisation in the sector selected was weak. Where examples of mechanisation were provided there was little discussion. Question 15 - limited understanding of steps in identifying the target market. The four "P's" were not linked to a 'new low-fat salami'.

Question 16 - the steps in developing the new product were incomplete with limited reference to the 'new healthy snack for teenagers'. Likewise, limitations and strategies were very general without links to the new healthy snack.

Below Average

These candidates demonstrated very limited understanding of the questions. Knowledge was weak or incorrect, vague statements were common. Examination technique was poor with sections of questions not attempted. Inconsistencies between the number of responses to question 15 and 16 and questions 21 - 24 in (Section III) demonstrated that students selected a question which they perceived to be the easiest regardless of whether this had been the option strand studied at school.

Examples of these qualities include:

Question 13 - legal requirements were limited to information 'they must have' on a package.

Question 16 - the products selected lacked commercial reference, they tended to be descriptions of food prepared from a recipe in a practical lesson. Only a few steps in developing the product were identified. The suitability of the new food to the target market or health was limited to broad statements such as "healthy because they taste good". Vague references to a "prize" or "freebies" were the only issues identified in establishing the product.

Section III Questions (40 marks) 2 questions (20 marks each)

The following table indicates the percentage of candidates who responded to each of the questions in Section III. It appeared that a number of candidates attempting questions 21 - 24 may have elected to respond to a question, which had not been studied in class. This is supported by the selection data in Section II.

53% }	
}	
11%}	1000/
}	100%
19%}	
}	
}	
17%}	
400/7	
19%]	
19%]	49%
]]	49%
19%]]] 30%]	49%
]]	49%
]]	49%
]] 30%]	49% 51%
]] 30%]	
	11%} 11%} 19%} 17%}

Excellent / Above Average

Candidates demonstrated a thorough understanding of issues with extensive discussion supported by pertinent examples always relating information to the question. Ability to analyse and interpret was clearly evident. Technical terminology was used in context.

Examples of these qualities include:

Question 17 - supported chosen method of food processing with relevant examples correctly linked to nutrition / availability / ecological sustainability / consumer appeal. Excellent discussion of canning / freezing with links to principles and effects of preservation. Awareness of social change / trends and impact on convenience food demonstrated.

Question 18 - clearly identified how the nature of the product influenced the choice of transport, storage and distribution. All three systems were clearly explained in relation to the chosen food product.

Question 19 - rights and responsibilities were identified and related to food safety and protection, candidates thoroughly understood Acts and Legislation and were able to identify a range of appropriate consumer responses to food poisoning.

Question 21 - 3 issues were explained with relevant food industry / food product examples.

Question 22 - a thorough understanding of marketing concepts and marketing strategies was demonstrated with relevance to flavoured milk.

Question 23 - detailed knowledge of the steps in developing new food products were supported with a wide range of reasons for their development. Current consumer issues and recent technological developments supported the discussion.

Average

These responses provided only limited discussion and failed to relate information to the questions.

Examples of these qualities include:

Question 17 - the most obvious disadvantages were discussed, knowledge lacking about nutrition. Difficulty identifying disadvantages in relation to 'availability' of canned / frozen food.

Question 18 - did not provide reasons for the methods selected. Knowledge of distribution systems lacking.

Question 19 - lists of rights, responsibilities and legislation with no relationship to safety and consumer protection. Vague ideas of how to address problems.

Question 20 - limited understanding of advantages and disadvantages, unable to develop discussion, which linked this information to producers and consumers.

Question 21 - only two or three issues were listed with limited discussion, environmental issues focused on packaging and recycling. Marketing strategies and examples were lacking.

Question 22 - information related to product and promotion, information not related to flavoured milk or a wider target market.

Question 23 - handmade chocolates explained as if home made, knowledge not linked to chocolate example.

Question 24 - discussion was mainly about consumer demands and profitability; examples of products were out dated. Some misinterpretation with discussion of new types of products rather than reasons for developing them.

Below Average

These candidates had limited and at times inaccurate knowledge which demonstrated a lack of understanding.

Examples of these qualities include:

Question 17 - small number of advantages / disadvantages with no discussion.

Unrelated facts about food preservation techniques. Poor understanding of terminology. Contradictory facts and information.

Question 18 - failed to identify a food product, food processing often discussed. Little knowledge of food manufacture, quality control, transport, storage or distribution.

Question 19 - little discussion of consumer protection and legislation. Consumer action focused on compensation.

Question 20 - confused about genetically modified foods. Poor explanation of advantages and disadvantages, little use of examples. No distinction between producers and consumers.

Question 21 - all issues were not discussed, some confusion between 'ethical' and 'ethnic'. Marketing strategies neglected.

Question 22 - did not address new target market, emphasised promotion and advertising. Discussed current promotion of milk.

Question 23 - recalled facts not related to the question, idea generation only referred to brainstorming. Simplistic discussion of taste testing only method of testing the product.

Question 24 - some candidates used a marketing focus giving only one or two reasons for developing new products.

3 Unit (Additional) - Written examination

Generally candidates labeled all questions clearly and answered questions that included parts in sections clearly identifying the part of the response. The percentage of candidates who responded to each of the questions:

Question 1	49%
Question 2	50%
Question 3	91%
Question 4	00/2

Excellent / Above Average

These candidates provided an analytical approach with solid discussion using relevant examples, which demonstrated a broad understanding of the question. Terminology and knowledge of current issues were evident.

Question 1 - strong definition of organics, well supported in all areas (health, environment and price) with a variety of examples. Strong links to the influence of consumer demand on organic foods were evident.

Question 3 - candidates provided relevant examples using fruits and vegetables demonstrating a broad understanding of health and dietary problems / solutions, resources, both human and non human, the Australian Dietary Guidelines integrating the relevant Dietary Guidelines to the *Seven - a - Day* program.

Question 4 - a thorough understanding of relevant import legislation was evident. This was supported by a variety of company and consumer decisions linked to selling pre-packaged imported foods.

Average

These responses provided less concise discussion with examples poorly linked to the questions. Information tended to be less informed with parts of questions lacking appropriate detail.

Question 1 - price was poorly done; government legislation was limited to labeling or advertising.

Question 2 - information often not linked to 'new millennium sports drinks', technological development was very brief.

Below Average

Very general information listed without discussion or relevance to the questions.

Some evidence of confused facts or inaccurate information.

Question 1 - Dietary Guidelines and Diet Pyramid confused.

Question 3 - often a good explanation of market research but without application to sports drinks.

Question 4 - confusion between genetically modified foods and hydroponics.

3 Unit (Additional) - Individual Research Project

In general the overall standard of the IRP indicated a high level of achievement. Candidates had a sound understanding of the requirements of the IRP. The resource lists were comprehensive with increasing usage of the Internet and often detailed analytical annotation. The diversity and complexity of many topics chosen gave an excellent cross section of Food Technology candidates in both rural and urban locations opportunities to pursue areas of interest.

Synopsis

Better candidates gave a thorough outline of the research including both what they had done and how it was done, followed by the major conclusions drawn. Below Average candidates wrote the synopsis before completing the project and only gave a brief, broad overview.

Rationale

Generally aims were clearly stated. The better candidates gave good explanations of the relevance to both themselves and the wider community. Some candidates did not distinguish between the synopsis and the rationale and gave very broad and brief statement in this section.

Body

The majority of candidates presented this section in a well-structured format. Some projects lacked depth in the critical analysis of their findings and the linkages between primary and secondary material were not always evident. For a smaller number of candidates primary research was non-existent.

Conclusion

Excellent candidates related main conclusions back to their aims and were able to make recommendations. Poorer scripts were vague and simply repeated findings from the body with no recommendations.

Resource List

Resource lists were generally well done with a wide variety of resources used and comprehensive annotations. A small number of scripts used outdated resources and failed to adequately annotate.

Diary

The better diaries showed a logical sequence of progression through the research process and were both analytical and reflective.