

General Certificate of Education

Design and Technology: Food Technology 5541/6541

FTY3

Mark Scheme

2005 examination - June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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(a) Explain why there is an increased demand for ready made meals for children (5-11) years old).

Subject content:

More children eat foods independently, not with other members of the family – destructuring of meal occasions.

Lack of time for food preparation by parents because of an increasing number of families where both parents work or single parent households.

Children have busy social lives and food consumption has to be fitted in around these making ready prepared foods quick and convenient.

An increasing number of children have special dietary needs, for example, food allergies, vegetarian, etc.

Children exert more influence over the purchase of foods and what they want to consume – pester power.

Influence of the advertising of children's foods on TV in magazines, etc.

Peer pressure.

High disposable incomes meaning that parents can afford to purchase foods aimed at children.

Consumers place more emphasis on their leisure time, not wanting to spend time on unnecessary tasks such as food preparation and as a result expect foods to be more convenient.

Lifestyles are more time pressured, therefore more consumers want to save time on food preparation.

More economically active women.

Families eat less together, particularly children eating different meals to parents.

A more casual and less formal approach to meal time.

Tendency to graze rather than eat three meals a day.

Changing consumer tastes due to more foreign travel, TV programmes etc. meaning that the availability of a greater variety of food is required.

Desire for instant gratification, children cannot wait for the time taken to prepare a meal they wish to consume food as soon as possible.

Trend towards the desire for different products, food can be seen as entertainment.

More consumers own microwaves.

Mark allocation

Explanation

Mark range 1-3

Little or basic knowledge of why there is an increased demand for ready made meals aimed at children (5-11 years old)

1 reason may be explained or 2 or 3 briefly outlined

| Some knowledge of why there is an increased demand | 4-6 |
|---|------|
| for ready made meals aimed at children (5-11 years old) | |
| 3 or 4 reasons may be outlined or 2 or 3 explained | |
| accurately and in detail. | |
| Sound and accurate knowledge of why there is an | 7-10 |
| increased demand for ready made meals aimed at | |
| children (5-11 years old) | |
| 4 or 5 reasons explained accurately and in detail | |

(10 marks)

(b) Discuss why food manufacturers would consider the use of organic ingredients when producing ready made meals for children (5-11 years old).

Subject content:

Make sure candidates do not confuse with additives

Pesticide residues in non-organic foods and the possible adverse effects on children's health considering the acceptable daily intake which takes into account the fact children may eat far more of a food compared to their body weight than an adult

Some consumers prefer natural foods.

No ingredients will have been genetically modified.

Organic meat, poultry and dairy produce should come from systems where there are high animal welfare standards and some consumers are concerned about intensive farming, battery egg production, etc.

An increasing number of consumers are prepared to pay the higher costs for organic foods.

Current concerns about health issues, some parents may view organic ready meals as a healthier alternative.

Do not accept 'better nutritionally' / health wise unless explained

Mark allocation

| Explanation | Mark range |
|---|------------|
| One reason briefly discussed or 2 or | 1-3 |
| 3 outlined | |
| Two reasons discussed or 3 or 4 | 4-6 |
| briefly discussed | |
| Three or more reasons are soundly | 7-10 |
| and accurately discussed to show a | |
| clear understanding (to achieve at | |
| this level candidates must discuss) | |

(10 marks)

You have been asked to design a ready made main meal for a child (5 – 11 years old) that:

- is part of a range of children's (5 11 years old) foods to be sold in a supermarket;
- considers children's (5 11 years old) nutritional needs;
- is suitable to be reheated in the microwave;
- will attract children (5 11 years old) and parents;
- will appeal to cost conscious consumers.
- (a) Sketch and annotate (making reference to the criteria above) four possible initial design ideas for ready made main meals for children (5 11 years old).

Subject content:

Each sketch should reflect the general design criteria:

Is part of a range of children's (5-11 years old) foods

Is suitable to be sold in a supermarket

Considers children's (5-11 years old) nutritional needs

Is suitable to be reheated in the microwave

Will attract children (5-11 years old) and parents

Will appeal to cost conscious consumers

Each initial idea must be a different product and not a variation of the same product

Each initial idea should be communicated using a sketch which could be 2D, 3D, cross section etc.

Each sketch should be annotated, named and to achieve the higher marks there should be some explanation/ discussion of how idea meets the criteria

Mark allocation per initial design idea (4 x 8 marks)

| Explanation | Mark range |
|---------------------------------------|------------|
| Sketch is difficult to recognize, no | 1-2 |
| annotation and initial idea may not | |
| reflect the design criteria | |
| Sketch is recognizable, annotated and | 3-5 |
| reflects some of the design criteria | |
| Sketch is recognizable, annotated in | 6-8 |
| detail to explain/ discuss how the | |
| idea meets the design criteria | |
| N.B. if no sketch for an idea no | |
| marks can be allocated | |

(4 x 8 marks)

(b) Select your most promising design and develop it further to illustrate your final design proposal.

In this question, marks will be awarded for:

(i) quality of communication;

Subject content:

Assess the quality of communication of the development of the final design proposal. Communication should show the use of a range of methods including text, diagrams and annotation.

Mark allocation

| Explanation | Mark range |
|---|------------|
| Basic level of communication skills resulting in limited development | 1-2 |
| Good level of communication skills resulting in appropriate development | 3-4 |
| High level of communication skills resulting in clear and accurate | 5-6 |
| development | |
| | (6 marks) |

(ii) ingredients/materials to be used;

Subject content:

Assess the selection of materials for the development of the final design proposal. Materials should be described to show the quantities, types, prepreparation etc.

Mark allocation

| Explanation | Mark range |
|--|------------|
| Limited description of materials, some of which may not be appropriate | 1-3 |
| Adequate description of appropriate materials | 4-6 |
| Clear and articulate description of appropriate materials | 7-8 |
| | (8 marks) |

(iii) originality/innovation of the product;

Subject content:

Assess the originality/ innovation of the development of the final design proposal.

Mark allocation

| Explanation | Mark range |
|--|------------|
| Little originality/ innovation | 1-2 |
| The design is already available in supermarkets | |
| Some originality/ innovation | 3-4 |
| The design is similar or a variation of a product of a product already available | |
| in supermarkets | |
| Good originality/ innovation | 5-6 |
| The design is not already available in supermarkets | |
| | (6 marks) |

(iv) development of chosen idea.

Subject content:

Assess the development of the chosen design as a ready made meal for children (5-11 years old)

Mark allocation

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|--|------------|
| Explanation | Mark range |
| Limited evidence to show development of chosen idea that does not always | 1-4 |
| reflect the general design criteria | |
| Evidence to show good development of chosen idea that reflects the general | 5-9 |
| design criteria | |
| Evidence to show considerable development of chosen idea that fully reflects | 10-14 |
| the general design criteria including sketches and explanation/ discussion | |
| resulting in a realistic and appropriate solution | |
| | (14 marks) |

(14 marks)

(c) Describe how a food manufacturer could use packaging/labelling to attract children (5 – 11 years old) and parents to ready made main meals.

Subject content:

Children's TV or cartoon characters.

Games, quizzes, etc.

Colour.

Style of writing.

Free gifts advertised.

Personalities.

Use of a window to allow the child or parent to view the food.

Text to explain why the food is an appropriate children's food.

Shape.

Information.

Healthy eating claim would attract parents

Mark Allocation

| Explanation | Mark range |
|---|------------|
| Limited description of how a food manufacturer would use the packaging/ | 1-3 |
| labelling to attract children and parents to purchase ready made meals | |
| Adequate description of how a food manufacturer would use the packaging/ | 4-7 |
| labelling to attract children and parents to purchase ready made meals | |
| Clear and full description of how a food manufacturer would use the | 8-10 |
| packaging/ labelling to attract children and parents to purchase ready made | |
| meals | |
| | · |

(10 marks)