Version: 1.1 0709



### **General Certificate of Secondary Education**

# Design and Technology: Food Technology

45451

## Report on the Examination

2010 examination - June series

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#### **General Comments**

This was the first year of a new specification. Overall, candidates of all abilities were able to access the questions set. There were however, some centres where whole questions towards the end of the paper were left untouched. This reflected either a failure of centres to teach across the whole specification, possibly as many candidates entered were Year 10 students and had completed the course in one year (or more possibly was linked to the fact that the examination time clashed with an England World Cup match!). Centres are advised to consider carefully whether candidates are ready for the demands of a formal GCSE examination before entering them.

Most candidates appear to be using the mark allocations to support the quality of answers. Where the majority of marks were lost it was due to candidates failing to provide extended answers and giving simplistic comments often only worth 1 mark, when 2 or more marks were available.

It was pleasing to see that candidates are showing a deeper knowledge of social and environmental issues best by consumers and the food industry than that seen in answers to the legacy examination in previous years.

#### Section A

The focus for this Section only was shared with candidates via a preparation sheet, which could be made available to them early in March. The question required candidates to communicate two different design ideas based on savoury, main meal products. Annotation needed to reflect the design criteria and subsequently include a plan for making, details of potential packaging, nutrient content and possible developments for vegetarian consumers.

Responses showed that centres had used the pre-release information to prepare candidates well.

#### **Question 1**

- **1 (a)** The vast majority of food products sketched were appropriately chosen and many candidates achieved high marks. Detailed annotations were given for a large range of different products showing that centres had explored the context given fully. Higher marks were given to candidates whose annotation linked the design idea closely to the design criteria given. Organisation of design idea information on the page was to be commended in many centres.
- **1 (b) (i)** The production was completed well by most candidates, who used the given columns to help support their planning. Details were given about a range of control checks, hygiene and safety considerations and a logical step-by-step indication of stages of making.
- **1 (b) (ii) and (iii)** Few candidates could name materials for packaging correctly. Common incorrect responses seen included candidates giving 'cardboard' instead of 'paperboard'. Reasons why materials were suitable needed to identify characteristics of materials, not generic functions of packaging as given by some candidates.
- 1 (c) (i) The examining team were pleased to see that the majority of candidates had identified a range of nutrients and their functions correctly. There is a more detailed focus upon this than in the previous specification and candidates have shown their ability to give more detailed responses on this aspect. Incorrect responses were usually where the example of 'protein' had been repeated or generic terms, e.g. vitamins or minerals, were given instead of specific nutrients.

**1 (c) (ii)** Quorn was a popular response given; the majority of candidates knew that animal based foods needed to be removed and often identified a range of vegetable base developments.

#### **Section B**

#### Question 2

- **2 (a)** Most candidates answered this question well and made good reference to computers and their use in market research. Advantages and disadvantages of using computers were well understood by candidates, with most scoring full marks.
- **2 (b)** Excellent responses to this data retrieval question were seen, with the majority scoring full marks.
- **2 (c) (i)** Candidates knew what is meant by 'chilled food' and the majority gained full credit for this. Where marks were lost it was by confusion between 'chilled foods' and 'cook-chilled foods'. Fewer candidates were familiar with the term 'ambient', with many candidates simply referring to tinned food or fresh food without either further clarification or linking this to appropriate methods of storage.
- **2 (c) (ii)** Most candidates managed to gain several marks for this question. Responses were generally well structured, linking social issues, lack of cooking skills, busy lifestyles and availability of ready meals.

#### **Question 3**

- **3 (a) (i)** Many candidates gained good marks for this question, but where candidates failed to gain full marks it was due to lack of clarity or repetition given in answer. Developments for chocolate éclairs and sausage rolls were of a higher standard than responses for the sandwich cake. Some candidates did not understand the term sandwich cake and incorrectly referred to bread products in their responses, even though there was also a picture of the product included within the paper.
- **3 (a) (ii)** Most candidates showed a clear understanding of traffic light coding, advertising and labelling given on packaging.
- **3 (b)** Answers to this question generally only gained half marks. Candidates failed to extend answers or give enough points for full marks. The 'Eat Well Plate' reflects the developing focus on applied nutritional knowledge but many centres did not appear to have covered this fully. Many responses lacked structure and content.

#### **Question 4**

- **4 (a)** Few candidates seemed to have recognised the need for specific points in their answer to this question. Too often the design criteria points were repeated.
- **4 b (i) and (ii)** A well answered question. Most candidates gained full marks and showed a good knowledge and understanding of control checks for pizzas. For part (ii), most were able to give cause and preventative measures for the stated problems.

**4 (c)** Responses seen here often varied according to the centre. Some centres had obviously taught candidates about standard components and these candidates fared well giving a range of reasons why they support consistency, but too frequently guesses were made and incorrect answers related to use of equipment. Good answers reflected on the consistency in terms of shape, size, nutrient content, appearance, weight. Centres should note that this examination tests the entire content of the GCSE Design and Technology: Food Technology specification.

#### **Question 5**

- **5 (a)** Excellent responses were received for this question, with the majority of candidates scoring full marks and giving a range of appropriate answers. Where marks were lost it was usually due to the use of the word 'wash', instead of indicating 'clean' or not specifying 'clean aprons/equipment'
- **5 b (i) and (ii)** Candidates displayed a sound knowledge of the use of food probes and instructions for their use.
- **5 b (iii)** Less well answered. Candidates were aware of the need to carry out regular temperature checks but many gave reasons why refrigerators / chillers were kept a low temperatures rather than how. Careful reading of exactly what the question is asking remains a key element of examination technique.
- **5 (c)** Most candidates could correctly identify temperatures for refrigerators and core temperatures but were less successful in giving the danger zone temperatures.

#### **Question 6**

- **6 (a)** Candidates displayed a good understanding of issues surrounding food packaging noting excessive packaging, use of expensive materials, recycling, landfill sites, and dangers to wildlife. Answers were often well structured and considered.
- **6 (b)** A mixed response was seen in answer to this question. Many candidates responded well and could describe fully issues related to 'food miles', nutrient retention, costs etc. Other candidates incorrectly talked about consumers travelling miles to get their food.
- **6 (c)** Most candidates gained at least one mark and could correctly explain an issue related to new technologies. Many referred to GM foods, many to the consumer's fear that these developments may lead to a risk to health.

#### Mark Ranges and Award of Grades

please see the Mark Ranges and Award of Grades