

General Certificate of Secondary Education June 2011

Design and Technology: Food 45451 Technology

(Specification 4545)

Unit 1: Written Paper

Report on the Examination

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General Comments

Candidates responded well to the new specification paper (of which this was the second sitting) which tests the full ability range. The overall marks awarded reflected the whole ability range with final marks ranging from zero to full marks. Standards of literacy were much improved this year, a wider range of knowledge was evident and fewer candidates left questions blank.

Many centres had all their candidates awarded high marks, here it was evident a full and detailed revision programme had been delivered. These candidates evidenced a sound knowledge of topics, made good use of the correct specialist terminology, showed good understanding of the terms such as 'describe' and 'explain' and used well structured layouts. Candidates who used the mark allocations to guide their responses tended to gain the higher marks and many candidates gave mature responses to guite difficult concepts.

Alternatively other centres often had many candidates who lacked the detailed, specialist knowledge needed to gain the higher marks and often gave simplistic answers showing little extended knowledge. Some centres had not noticed that the preliminary material clearly only related to Section A of the paper and had not trained their candidates sufficiently on all aspects of the specification. Centres are reminded that Section B will always cover content from across the entire specification and that candidates' revision practice must not simply be on the context provided on the preliminary material for Section A.

On the whole centres need to be congratulated in meeting the demands of this single tier paper and are encouraged to develop their good practice further in the future.

Aspects of the paper done particularly well or badly

Well answered questions

1(a), 1(b)(i), 1(b)(ii), 1(b)(iii), 2(a), 4(a)(iv), 4(b), 5(a)(i), 5(b)(iii), 6(a), 6(c)

Satisfactorily answered questions

1(c)(i), 1(c)(ii), 2(b)(i), 2(b)(ii), 2(c)(ii), 2(c)(ii), 3(a)(iii), 3(a)(iv), 4(a)(i), 4(a)(ii), 4(a)(iii), 4(a)(iii), 5(b)(ii), 5(b)(iii), 5(b)(iii), 6(b)(iii)

Poorly answered questions

3(a)(i), 3(a)(ii), 3(b)

Questions

- **1(a)** The design question was very well answered, with most candidates covering all the specification points. Some candidates failed to address all the design criteria, often omitting details relating to the healthy option aspects. Simply adding the word 'healthy' did not attract credit, although identification of specific nutrients or reference to why ingredients used were healthy were credited. A very small proportion included sweet or non bread based products. Many pupils added colour and great depth of detail to their designs.
- **1(b)(i)** Plans were, in the main, excellent and detailed with a good range of control checks shown. Some candidates included plans for the dips, which were not required, but they still gained credit for showing the main aspects of production planning. Better responses included reference to cleanliness of worker and working environment, use of named processes, critical temperatures, e.g. warm conditions for yeast, finishing and quality control checks.
- **1(b)(ii)** Most candidates knew the ingredient which would provide carbohydrate with a few giving 'bread', a product, as an answer instead of an ingredient. Flour was the most popular choice in correct responses.

- **1(b)(iii)** This question produced some excellent answers. Most candidates managed to refer to having too much energy, storing of excess energy as fat, gaining weight and too little energy, lethargy, tiredness and losing weight.
- **1(c)** Generally more able candidates gave educated answers and less able candidates waffled and repeated answers for both special dietary needs and cultural needs. Candidates need to specify diets chosen in order to gain full marks in this type of question, generic responses to the need for 'healthier' foods were the least successful answers. The majority of candidates referred correctly to celiac or diabetic requirements. There are still a number of candidates who write about replacing 'meat' with 'beef' or 'butter' with 'margarine' because it's better for you without showing any true understanding. Good responses gave details of specific religious practices relating to food e.g. halah and kosher foods.
- **2(a)** Most candidates answered this well, gained full marks and showed good interpretation of the data available.
- **2(b)(i)** Many understood the terms and better answers were detailed, gaining full marks. 'Sealing' was more often not well explained, though the overall understanding was present but lacking in the detail required for two marks. Better responses included information on sealing the 'outside' of the chicken and recognition of simmering temperatures being below boiling point.
- **2(b)(ii)** Most responses gained maximum marks for this. They showed understanding about bacteria needing to be killed in order to avoid food poisoning and often included reference to salmonella and key temperatures.
- **2(c)(i)** Many candidates understood that this informed consumers but failed to develop why for the second mark. Better responses included reference to the need for this information in order to maintain a balanced diet.
- **2(c)(ii)** Very few candidates made good reference to the data to give examples of how the chicken met the GDA and how various percentages contributed to the daily intake. There were some responses where discussion repeated information from the previous question. Better answers explained how this product could be used as part of daily intake as it showed there was sufficient of the allowance left over for use at other meals in the day.
- **3(a)(i)** This question was either very well answered or poorly answered, reflecting differences between whole centres. It is important for centres to ensure that during the course the whole specification is covered as this is the main focus of section B on the written paper. Some candidates appeared to have no knowledge of pastry types or ratios and guessed, some identifying 'quiche pastry', some incorrectly giving 'choux pastry', 'short' pastry or 'crust' pastry. Both measurements and rations were accepted in the response with the ratios being related to the flour quantity give by the candidate. Some candidates gave very small measurements, insufficient to make the intended product.
- **3(a)(ii)** Candidates gave poor responses to the use of different fats in pastry. Most answers were given as for taste and colour without examples and the word 'healthier' was used without justification. Often candidates gave incorrect reasons for use e.g. 'margarine used as it was lower in fat than butter'; many still use the word 'margarine' when the term 'low fat spread' is now the acceptable terminology.
- **3(a)(iii)** Some candidates are still naming cardboard as a suitable material incorrectly instead of 'paperboard'.
- **3(a)(iv)** Many candidates gained some marks here but did not give sufficient reasons correctly for full marks.

- **3(b)** This was only answered well by the best candidates. Many discussed control checks on a production line in a factory and failed to mention the focus on sensory testing controls. Many were very unsure or only managed the glass of water and separate booths. Only a few candidates made good use of the opportunity to gain marks from sketching or their sketches repeated what was in the notes. Other candidates confused controlled conditions and wrote about their controlled assessment in Food Technology!
- **4(a)(i)** This was often answered with the correct answer to the next question even though marks could be awarded if written down correctly. Candidates should learn to check their answers to see if they have followed instructions correctly. White flour was rejected by consumers because wholemeal was healthier was a popular answer.
- **4(a)(ii)** Wholemeal flour being 'healthier' was a popular answer with better answers explaining why. Candidates scored reasonably well by demonstrating their knowledge of the benefit of wholemeal flour. Some more able candidates recognised the opportunity to involve consumer choices and lifestyle.
- **4(a)(iii)** The focus of this question was on 'delivery'. A number of candidates did not relate their answers to this and showed confusion about where the control checks were taking place. They gave responses more relevant to checks in the bakery than regarding the delivery process. Correct answers related mainly to identifying a range of quality and quantity of product and condition of packaging materials.
- **4(a)(iv)** Many candidates knew a control check is carried out by computers, usually that they were quicker, accurate, error free and worked 24/7 but many failed to give enough detail to gain full marks.
- **4(b)** Generally very well answered by most candidates. Most gave correct responses to all three problems and offered an appropriate prevention measures. However, many candidates incorrectly thought scones were made using yeast mixtures.
- 5(a)(i) Most candidates knew the names of two correct additives and scored the full 2 marks.
- **5(a)(ii)** This question differentiated very well: less able candidates, for example, only gave a single advantage or disadvantage thus losing out on marks. The most common correct responses were to improve sensory qualities and hyperactivity in children.
- **5(b)(i)** Some candidates referred to 'unclean' or 'unwashed' vegetables as being organic however better responses identified that the natural state of foods was maintained by not using fertilisers, pesticides or any chemicals during production and gained full marks. Several confused organic with local products.
- **5(b)(ii)** Many candidates gained at least one mark recognizing the popularity of organic foods or the need for manufacturers to attract health conscious consumers.
- **5(b)(iii)** It was pleasing to see that candidates have embraced the need to understand sustainability issues. Some very detailed, knowledgeable answers were seen, which could have gained more marks than were available for this question! This question was understood by the majority of candidates. Responses indicated an increased depth and level of understanding of environmental, food miles and related economic issues in this country and the third world. There was evidence that some candidates were aware of QWC marking on this question.
- **6(a)** Very well answered by most candidates, with the majority correctly identifying uses and reasons linked to the various items of equipment. Correct answers related to quality control, preservation of nutrients, to scale of production.
- **6(b)(i)** Evidence of improved knowledge was displayed in answers to this question. Even poorer responses gained marks by identifying bacterial contamination, foreign bodies or chemical contamination. Less successful answers referenced 'something falling in'.
- **6(b)(ii)** Some confusion was shown in answers to this question. Those candidates had not taken note of the word 'equipment' and gave generic responses that involved personal hygiene.

6(c) Many candidates gained 3 or 4 marks but needed to give more points or details to gain full marks. The most common responses seen included references to proximity to water, reading instructions or training staff and care over where wires were placed.

Mark Ranges and Award of Grades

Please see the following link:

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