

# **Design & Technology (Food Technology)**

General Certificate of Secondary Education **GCSE 1954**

General Certificate of Secondary Education (Short Course) **GCSE 1054**

## **Combined Mark Schemes And Report on the Units**

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**June 2005**

**1954/1054/MS/R/05**

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**Mark Scheme 1954/1, 1054/1**  
**June 2005**

- 1 (a) **1 mark for each correct answer. Maximum 2 marks.**
- Chicken
  - Bacon.
  - Mayonnaise. [2]
- (b) **2 x 1 mark. Maximum 2 marks. Do not accept sliced.**
- Naan bread.
  - Pitta bread.
  - Granary bread/roll/bap/cob.
  - Rye bread.
  - White bread/roll/bap/cob/finger/bridge/barm/cakes/stotties/oven bottom muffins.
  - Tortilla wrap.
  - French stick/baguette.
  - Bagel.
  - Flavoured bread e.g.sun dried tomato/sesame/poppy/low salt/olives/nuts/cheese
  - Wholemeal bread.
  - Potato cakes.
  - Soda bread.
  - Best of both/ wholemeal white
  - Ciabatta
  - Foccacia
  - Low carbohydrate
  - Wheat free/no gluten [2]
- (c) **3 x 1 mark for each correct statement maximum of 3 marks.**
- Hair covered/hat/net.
  - Hair tied back.
  - Covered cuts/grazes/with blue plaster.
  - No jewellery/only wear a wedding ring.
  - Protective clothing worn/apron/overall/clean clothing
  - Wash hands before starting work/after going to the toilet.
  - Don't touch the face.
  - Don't cough or sneeze over food.
  - Gloves
  - Nails cut short/clean/no nail varnish [3]
- (d) **1 mark for correct answer.**
- Refrigerator/ fridge.
  - Chiller cabinet. [1]
- (e) **1 mark for each reason, maximum 2 marks.**
- Hungry.
  - Nutritionally sound.
  - Convenient/lots of outlets.
  - Labour saving/time saving/quicker/no preparation.
  - Variety available.
  - Cheaper – must be specified how.
  - Easily carried/not easily damaged
  - Keeps fresher for longer/not drying out [2]

**Total [10]**

- 2 (a) 1 mark for each correct answer. Maximum 3 marks.**
- Chicken Korma – refrigerator/fridge.
  - Mayonnaise – once opened in a refrigerator/cupboard until opened/refrigerator.
  - Pasta – cool dry place. **[3]**
- (b) 1 mark for the correct answer.**
- Accept any temperature between 0°C–8°C. **[1]**  
**Do not accept any number above 8°C**
- (c) 1 mark for each clear reason. Maximum 2 marks.**
- To make sure it is within the legal limits.
  - Make sure it is not above 8°C.
  - Make sure it is not too cold/causing food to freeze/not too warm.
  - So food is in good condition/does not go off/safe/reference to bacteria/fresh
  - To make sure it is working/not broken down/not been tampered with
  - It is a legal requirement/should be recorded three times a day.. **[2]**
- (d) 1 mark for correct answer.**
- Microwave. **[1]**
- (e) 2 x 1 mark for each correct reason. Maximum of 2 marks.**
- Products are cooked to the correct temperature/above 63°C.
  - Safe to eat.
  - It is understood by people of all abilities/people know what to do/ages.
  - To reduce the risk of food poisoning.
  - Consumers have a satisfactory product to eat.
  - Customers will like the product and purchase it again.
  - So product is not over cooked/under cooked/cooked properly/correctly. **[2]**
- (f) 1 mark for correct answer.**
- Temperature probe/food probe/probe.
  - Food thermometer/thermometer. **[1]**

**Total [10]**

- 3 (a) The idea must be new i.e. a traditional salad of lettuce, cucumber and tomato, traditional coleslaw would not be acceptable.  
 1 specification point = 1 mark.  
 2-3 specification points = 2 marks.  
 4-5 specification points = 3 marks.

**Put a line through the specification points addressed**

**[3]**

- (b) **1 mark for each valid explanation, do not credit the use of the same ingredient more than 3 times**

**Maximum 5 marks**

Design specification	How the design meets the specification point
To contain a variety of textures( <b>more than one</b> )	<ul style="list-style-type: none"> <li>• Use of ingredients to show contrasting textures – rice, pasta, nuts, seeds soft with vegetables such as carrots which are crunchy.</li> <li>• Use of vegetables with different textures e.g. carrots crunchy, tomatoes which are softer</li> <li>• Meat which is chewy</li> </ul>
To be colourful( <b>more than one</b> )	<ul style="list-style-type: none"> <li>• Use of different coloured fruits e.g. red and green apples.</li> <li>• Use of different coloured vegetables e.g. carrots, peppers, etc.</li> <li>• Use of different coloured pastas, rice.</li> </ul>
To include a protein food	<ul style="list-style-type: none"> <li>• Correctly identified protein food, e.g. fish, meat, cheese, eggs, quorn, tofu, beans, lentils, nuts</li> </ul>
To contain vitamin C	<ul style="list-style-type: none"> <li>• Correctly identified food to contain vitamin C e.g. peppers, citrus fruits, kiwi fruits, cabbage, spinach, broccoli, bean sprouts, tomatoes</li> </ul>
To be low in fat	<ul style="list-style-type: none"> <li>• Dressing Ingredients – show evidence of how a low/lower in fat product has been used, e.g. reduced fat mayonnaise, dressing, yoghurt, crème fraiche, fromage frais</li> <li>• Reference to fruit and vegetables not containing fat.</li> <li>• Use of pasta rice etc which are low fat ingredients</li> <li>• Use of cottage cheese, chicken, Quorn, low fat cheese, white fish, shellfish.</li> </ul>

**[5]**

- (c) **1 mark for each method. Maximum 2 marks.**

- Free samples/ taste testing.
- Special offers – buy one get one free/coupons/gifts.
- TV/radio.
- Printed press – magazines/newspapers.
- Supermarket fliers.
- Internet shopping sites e.g. tesco.com.
- Billboards/posters
- Use of famous people

**[2]**

**Do not accept adverts**

**Total [10]**



- 4 (a) 1 mark for each correct answer in each box. Do not credit the same point twice in either column.  
**Maximum 5 marks.**  
**Mark example columns first. Check industry column has a viable response.**  
**Example should relate to use in industry.**

Example	How it will be used in industry
<ul style="list-style-type: none"> <li>Clip art</li> <li>Internet</li> <li>Paint/art packages (Paintshop pro, Coral, 2Ddesign, DTP, Serif draw, Word, Pro desktop)</li> </ul>	To create a mood board.
<ul style="list-style-type: none"> <li>Word processing</li> </ul>	<ul style="list-style-type: none"> <li>Creating questionnaires.</li> <li>To write reports to the retailer about the product being developed.</li> </ul>
<ul style="list-style-type: none"> <li>Internet</li> </ul>	<ul style="list-style-type: none"> <li>To find out competitors products/information on existing products.</li> </ul>
<ul style="list-style-type: none"> <li>E-mail</li> </ul>	<ul style="list-style-type: none"> <li>To send reports or photographs concerning products from the food manufacturer to the retailer.</li> <li>To distribute questionnaires.</li> </ul>
<ul style="list-style-type: none"> <li>Nutrition programmes (Food in Focus, Food for a PC, Nutrients)</li> </ul>	<ul style="list-style-type: none"> <li>To calculate the nutritional value of a product.</li> <li>Modelling</li> </ul>
<ul style="list-style-type: none"> <li>Spreadsheets (Excel)</li> <li>Graphs</li> </ul>	<ul style="list-style-type: none"> <li>To calculate costs.</li> <li>To analyse results of surveys.</li> <li>To analyse results of sensory analysis.</li> <li>Forecast sales.</li> <li>Scaling up</li> <li>To show results of questionnaire</li> </ul>
<ul style="list-style-type: none"> <li>Paint/draw programs</li> </ul>	<ul style="list-style-type: none"> <li>Produce packaging nets.</li> <li>Labelling.</li> <li>Art work on packaging.</li> <li>Produce 3D images</li> </ul>
<ul style="list-style-type: none"> <li>Scanner</li> </ul>	<ul style="list-style-type: none"> <li>Scanning images onto food.</li> <li>packaging</li> </ul>
<ul style="list-style-type: none"> <li>Databases</li> </ul>	<ul style="list-style-type: none"> <li>For nutritional information, recipe bank, storing questionnaire results</li> </ul>

(5)

**(b) 3 x 1 mark. Maximum 3 marks:**

- Visual checks – candidates may state at specific times.
- Using cutters/slicers.
- Using depositors/ to ensuring same amount of filling is used.
- Thermostatically controlled ovens.
- Use of pie presses/moulds/same size tins.
- Accurate weighing/correct amount/weight
- Rolling pastry to the same thickness.
- Temperature control during cooking process.
- Time control during cooking process.

**[3]**

(c) 1 mark for each suggestion. Maximum two marks.

- Re-using plastic containers.
- Re-using jars.
- Taking plastic bags back to supermarket/re-use/bag for life/supermarket own boxes
- Re-using foil dishes.
- Buying food products in recyclable packaging
- Recycle banks/bins/recycling
- Choosing products in minimal amount of packaging. [2]

**Total [10]**

**5 (a) 2 x 1 mark for each reason given. Maximum 2 marks.**

- Chicken is seen as a low fat product. May compare it to red meat. .
- Low in calories.
- Low in salt.
- Low fat product
- Source of protein
- Low in saturated fat
- Tomatoes contribute to “5” a day/portion of fruit and vegetables [2]

**(b) 2 x 1 mark for each benefit. Maximum 2 marks.**

**If referring to diet must give specific examples**

- Consumer knows what nutrients are in the product.
- Allows the consumer to compare products.
- Consumers can make informed choices if on a special diet e.g. low fat, weight reducing.
- Foods that have specific nutrient content can be purchased to meet the consumer's needs.
- Compare with guidelines for daily amount [2]

**(c) 2 marks for clearly explained function. If the answer is not well reasoned then maximum 1 mark e.g.**

**Modified starch thickens (1 mark) reheating to the correct/ same consistency as when the product was produced (1 mark).**

**Place one tick over function and one tick over reason**

- It produces a sauce that reheats to the same consistency each time.
- It produces a sauce that does not breakdown/separate when stored/syneresis
- The food manufacturer can make products to the same quality each time.
- It thickens the mixture/to correct thickness/gelatinisation/stops it going lumpy [2]

**(d) 4 x 1 mark. For full marks candidates must clearly explain. E.g. of answer below.**

**So the product sells (one mark for the statement) and therefore the company will not lose money (1 mark for the explanation).**

**Do not credit the same explanation twice**

Below are statements, which should have an explanation.

- To make sure the product will sell.
- To keep cost to a minimum/make a profit.
- To keep waste to a minimum/therefore saving money/not needing as many ingredients.
- To ensure the product appeals to the user group e.g. teenagers, vegetarians etc/so they will buy it.
- To ensure the product meets the design and product specifications/to identify improvements
- It allows for checks and improvements to be made/to improve quality.
- It allows checks to be made to the production system e.g. check shape, size, colour, weight .
- To identify whether the product can be made into a range/to add more variety/expand market share

[4]

**Total [10]**



**Mark Scheme 1954/2, 1054/2  
June 2005**

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Maximum 5 marks.

Mark example column first. Check industry column has a viable response.

Example should relate to industry.

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[2]

**Total [10]**

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- It allows checks to be made to the production system e.g. check shape, size, colour, weight
- To identify whether the product can be made into a range/to add more variety/expand market share.

[4]

**Total [10]**



## 3 (a) 4 x 1 mark for correct function. Maximum 4 marks.

Do not accept the same function twice.

No reference to nutrition

- **Self raising flour**

Contains a raising agent, which will produce carbon dioxide that will make the cake rise when cooking.

Forms the main structure of the cake/bulk

It is a soft flour with a lower gluten content therefore produces a soft even texture.

- **Sugar**

Sweeten the cake mixture.

Increases the bulk of the mixture.

When creamed with fat sugar helps to hold the air as an additional raising agent.

Extends shelf life.

Moisture.

Colour

- **Margarine**

Adds colour to the mixture.

Adds flavour to the mixture.

Hold air bubbles produced from mixing therefore helps to produce the texture and volume.

Creates a soft even texture to the cake mixture.

Helps extend the shelf life of the product/keeps moist/prevents drying out

- **Egg**

Adds colour.

Adds flavour.

Forms an emulsion when mixed into the fat.

Sets the mixture.

Aeration

[4]

Do not credit the same point twice.

## (b) 2 x 1 mark for reason. Maximum 2 marks.

- Saves preparation time – making the jellied fruits would be difficult by hand.
- Saves costs as equipment that is quite specialised for the decorations would not have to be bought.
- You get the same results every time and these can be checked when the icing/decorations arrive/consistency
- You are buying in icing and decorations that are made by people/companies who specialise in this therefore the expectation is that you should be getting high quality products/quality guaranteed.
- The ingredients required to make these would need to be purchased from different suppliers. You don't need to deal with these extra suppliers.
- Less manpower needed
- Ready immediately when needed
- Less skilled workers

[2]

(c) 1 mark for reference to each point clearly showing how it meets each of the specification points. Candidates must have drawing and notes for full marks.

- **Be novel**

Has a shape, which is different to a traditional Victoria sandwich cake.  
Shows how it is different by unusual/different decorations.  
Reference to TV characters, cartoons, books, sport, films, animals etc.

- **Be decorated**

Use of icing/chocolate/marzipan  
Use of sweets/sprinkles/dragees/silverballs/100's & 1000's  
Use of piping  
Use of coloured icing  
Use of computer images

- **Use a combination of flavours-must clearly show more than one flavour/must be named**

Candidates need to show how the flavours are used e.g. different flavoured icing or filling to sponge/or decoration.

- **Use a combination of textures –must name textures**

Use of nuts or fruit for texture  
Icing – soft type with crunchy decoration e.g. Smarties

[4]

Total [10]

4 (a) **1 mark for statement and 1 mark for clearly explaining it. Maximum 2 marks. Example of an answer might be: a design specification is written after doing market research (1 mark) and are quite general and wide allowing a range of possible products to be designed (1 mark). Two marks in total.**

- A list of criteria/points that initial design ideas are evaluated against.
- Design specifications are written early on in the development of a product and are quite general and wide e.g. will have an edible casing, will cost under £2, and will be reduced in fat.
- It may be divided into what are essential criteria for the product/what are desirable.
- Guidelines/criteria points that are developed from potential users identified needs. **[2]**

(b) **1 mark for statement and 1 mark for clearly explaining it. Maximum 2 marks. Example of an answer might be: a product specification is written after development work is completed (1 mark) it gives very detailed information about the product so it can be produced in identical batches (1 mark). Two marks in total.**

- A specification that is used when evaluating the success/criteria of the final product.
- This is written when the development work is completed and the final prototype is ready for manufacturing in large quantities.
- This gives the manufacturer exact/precise details of the product so that a replica can be produced of the final prototype.
- A description of the final product/manufacturing specification **[2]**

(c) 6 x 1 mark. Credit is given for the explanation/example of the specification point.

Do not credit the same point twice.

Candidates may give relevant examples for each specification point to support what they are saying.

- **Specific quantities of ingredients.**

This is required so that the recipe can be replicated exactly each time a batch is made. The proportions of ingredients may also be stated.

- **The types of cooking methods.**

**Must show an understanding that different methods may be required with relevant control points.**

If this is a product with several different types and times they all need to be stated separately. E.g. the filling for a pie would need its own information as well as the final cooking of the pie when it is assembled. The critical control points would also need to be detailed.

- **The specific size ingredients.**

This is so that all products look the same. It may include details on the size of individual ingredients e.g. the size of the chunks of carrots, the nozzle size meat has been minced on, the grating size of cheese. If the sizes are not consistent it may mean the product does not cook evenly or look the same each time.

- **Cooling methods**

Examples of cooling methods should be given. Reference must also be made to critical control points. Some foods must be cooled within a given amount of time e.g. meat products.

- **Assembling the product**

E.g. if in layers what goes in each layer, information on the way the ingredients are to be put into a product. Use of drawing to show assembly e.g. layered dessert

- **Finishing techniques**

Most products are finished in some way and these should be clearly stated. It is the outward appearance of a product that the consumer looks at therefore it is very important that these are stated so products don't look different to the consumer. E.g. if products are to be glazed when should this happen, details on garnishing must be specific e.g. the number of slices of tomato on a quiche/flowers applied to a cake, the thickness of icing in/on top of a cake. A drawing may show finishing of the product e.g. amount of garnish/slice of decoration.

[6]

Total[10]

**5 (a) 2 x 1 mark for each reason given. Maximum 2 marks.****Response must reflect manufacturer's viewpoint.**

- They may need to store products themselves and must use them within the given shelf life. If they don't they cannot be used to produce food products. Therefore they will be losing money.
- It is important in planning distribution of products from when they have been made. If the product only has a short shelf life it limits the amount of selling time. Ideally they want as long a period of time therefore giving maximum opportunity for selling the product.
- If there is only a short shelf life on a product and it is not sold within that amount of time money is lost. Retailers often want products with a long shelf life.
- To maintain profits.
- So they are confident that the product is sold in good condition.
- So they can identify when the product will begin to deteriorate.
- So they will not receive complaints for low standard products and therefore bad press.
- So they feel confident they are not selling products that may cause food poisoning/harmful to consumer

**[2]****(b) 4 x 1 marks for each section. Maximum 4 marks.**

## Preservatives

- Protecting it against the growth of micro-organisms which prevents/reduces food spoilage/decay.
- Products don't have to be purchased so often/can be purchased in larger quantities, which are often cheaper.
- Prevents growth of micro-organisms that can lead to food poisoning.
- Food is available out of season/ increases the consumer's choice of foods.
- Manufacturers can safely transport foods from other countries/greater distances.

## Antioxidants

- Prevents fat combining with oxygen and becoming rancid. This makes food taste unpleasant and have an unpleasant smell/odour.
- Slows down enzyme activity in fruits and vegetables that go brown when cut.
- Natural antioxidants such as ascorbic acid/vitamin C is often put with other fruits which would go brown e.g. apples, pears.
- Antioxidants are often used in dried food products such as soup, preserved meats and fish.
- Prevents fat-soluble vitamins (A, D, E, K) combining with oxygen.

## Emulsifiers and stabilisers

- Used to help substances that contain oil and water mix together. These would normally separate.
- Used in low fat products that have a high percentage of water to stay evenly mixed.
- Used to give foods a smooth creamy texture e.g. deserts.
- Used to extend the shelf life of baked foods therefore can allow shops/retailers a longer period of time to sell the product.
- Can be made from locust bean gum. Used to make products suitable for vegetarians that may have been thickened with gelatine in a similar alternative product e.g. thick and creamy yoghurts.
- Lecithin is a natural emulsifier found in eggs. It is used in many low fat spreads.
- Prevents separating/syneresis

**[4]**

**(c) Response must reflect manufacturer's viewpoint  
ONE mark for each point made. Maximum of 4 marks.**

- If it is by public demand it may mean that more products are sold and could therefore increase a manufacturers profits if they removed the additives/reference to allergies.
- Removal of additives may mean a shorter shelf life therefore there could be less profit due to wastage.
- There may be an increase of problems because foods do not keep so well during processing and/or transportation.
- Difficulty for the manufacturer to produce food with a uniform consistency in large-scale production. Candidates may make specific reference to colour, flavour and aroma.
- Would need to use better quality ingredients/no additives to disguise poor flavours/colours
- Costs would rise as better quality ingredients would be used.
- Range of products could be limited.

**[4]**

**Total [10]**

**Mark Scheme 1954/3**  
**June 2005**

**1 (a) Plastic:**

- Strong/unbreakable
- Lightweight
- Flexible
- Does not react with food content
- Barrier to moisture
- Can be printed
- Can be vacuum formed/shape/moulded
- Can be frozen
- Can hold liquid/waterproof
- Microwaveable
- Cheap (to produce)
- Can be recycled
- Can be coloured
- Can be made see through/consumer can see through
- Keep fresh
- Keep out bacteria

**Metal:**

- Can be recycled
- Strong/unbreakable
- Rigid
- Barrier to moisture
- Can be printed
- Different thicknesses
- Can be laminated
- No special storage needed
- Long life of product
- Keep fresh
- Keep out bacteria

**Paperboard:**

- Renewable source
- Can be recycled
- Easily printed
- Strong/unbreakable
- Lightweight
- Variety of shapes
- Variety of sizes
- If treated can hold liquids/waterproof
- Microwaveable
- Different thicknesses
- Cheap to produce
- Easy to open/can tear open
- Keep fresh
- Keep out bacteria
- Biodegradable/rots down

(3 x 1)

**[3]****Do not credit same reason twice****Do not accept easy to pour/easy to transport****Do not accept answers related to shape e.g. easy to store**



**(b) Food is packaged to:**

- Protect (food from damage)
- Increase shelf life/keep fresh/stops spoilage
- Give information
- Transport from manufacturer to consumer
- Handle easily
- Protect from contamination/hygienic/prevents food poisoning/protect from being touched/keeps out bacteria/germs
- Easy to store/allows you to stack
- To promote/presentation
- Contains/keeps together e.g. small pieces/cereals
- Stops leakage
- Container to eat from
- Container to cook in
- Keeps content fresh
- Keeps out moisture/stops contents getting damp
- Stops product drying out
- Keeps product in shape
- Tamperproof

**N.B. Accept 'fresh' in both questions (a) & (b)**

**(2 x 1) [2]**

**(c) Different foods can be packaged:**

<b>Product</b>	<b>Method of packaging</b>
Eggs	Box/tray/jar-pickled eggs
Oranges	Paper bag/plastic netting/can/tin/box/plastic bag
Fruit juice	Carton/bottle/tetra pack

Candidates must give **different answer** for each product.

**(3 x 1)**

**[3]**

**(d) (i) Bar code**

**[1]**

**(ii) Litterman/Keep Britain Tidy/use a bin/rubbish/dispose of rubbish correctly/keep streets clean**

**Accept any reference to correctly disposing of rubbish  
Do not accept recycle**

**[1]**

**Total: [10]**

- 2 (a) (i) To thicken/make it less runny/gelatinisation/to make a gel [1]
- (ii) To add flavour/season [1]
- (iii) To add colour:
- parsley/chives/herbs
  - cheese
  - egg
  - prawns
  - tomato purée
  - red onion/caramelised
  - mustard
  - sweetcorn
  - bacon
  - tuna/smoked fish
  - chilli/cayenne/spice
  - tomatoes/puree/sauce
  - food colouring
  - additive
  - e numbers

**Accept any suitable savoury ingredient which would add colour**  
**Do not accept sweet ingredients/breadcrumbs/salt and pepper**  
**Do not accept “vegetables” must qualify e.g. coloured vegetables** [2]

- (b) (i) Any **two** from:
- Bolognaise
  - Chilli con carne
  - Chicken chasseur
  - Pasta bake
  - Lasagne
  - Pizza
  - Quiche
  - Minced sauce
  - Curry
  - Shepherds Pie

**Credit any appropriate savoury named dish** [2]  
**Do not accept just pasta**

(b) (ii)

- Easy to store/no special storage needed
- Easy/easier (to prepare/to use)
- Consistent product/reliable
- Easy to prepare
- **May** be cheaper
- Needs less skills
- Versatile/can have ingredients added to it
- Can be kept for emergency/longer shelf life
- **May** taste better/texture/appearance/flavour
- Quicker/useful to people with busy lives
- Convenient
- Little waste/portioned size
- Less clearing up
- Uses less energy in the home/saves energy
- Wide variety available

[3]

**Do not accept if simply states “cheaper”.**

(c) In the refrigerator  
In the freezer

[1]

**Total: [10]**

3 (a)

- Questionnaires/surveys
- Looking at existing products/supermarket survey
- Product analysis/disassembly
- Talking to experts/interview
- Internet
- Books/magazines
- Sensory analysis of existing products/taste testing of existing products
- Product analysis
- Disassembly (2x1) [2]

(b)

- To identify consumer needs
- To identify consumer preference/likes/tastes
- To establish target audience
- Where it can be sold
- How it can be marketed
- Identify gap in market
- Help calculate price
- Identify what sells/consumer trends/be competitive
- To find a recipe to modify (2x1) [2]

(c)

- Pie charts
- Tally charts/frequency chart
- Bar charts/histogram
- Table format/stem & leaf
- Written report/explanation
- Spreadsheet/database
- Star chart/star profile/diagram
- Pictogram
- Graphs/scatter diagram
- Using a named computer program e.g. Word, Excel etc.

**Do not accept 'chart'****Do not accept 'with a computer'**

(2x1) [2]

(d)

- Convenient for snack/easy to carry/quick
- Easy( to eat)
- High energy/full of calories/KJs
- Filling
- Variety of flavours available
- Advertising
- Perceived as being healthy/are sometimes healthy-must qualify
- Not time for meal/meal replacement/quick to eat
- Substitute for breakfast
- Appeal to children

**Do not accept 'healthy'.**

[1]

(e) Candidates must clearly use the specification

- Porridge Oats – add fibre
- Sultanas (or other fruit) – add fibre/required fruity flavour
- Chopped nuts – crunchy

**NB one food may meet 2 specification points**

**Accept any appropriate ingredient**

**1 mark per correct ingredient for crunchy/fruity/high fibre ingredient**

**Maximum of 2 marks if no attempt at a diagram**

**[3]**

**Total: [10]**

4 (a) (i) Hazard Analysis Critical Control Point [1]

(ii)

- Identifies points where hazards can occur
- Checks the food at critical points
- Fulfilling requirements of legislation/comply with law
- Assesses hygiene rules and regulations in work place
- Correct uniform/hair/jewellery.
- Personal hygiene/clean nails/wash hands
- Set up systems /procedures for workers to follow
- Safe and hygienic environment
- Preventing (cross) contamination/food poisoning
- Package food safely
- Label food correctly
- Coding of batches
- Correct storage/temperature control
- Correct transportation/temperature control
- Taking/analysing/keeping samples
- Data records

(2 x 1) [2]

(b) Weighing

- To ensure each biscuit has the same amount of ingredients/weight accuracy
- To ensure consistency every batch
- Eliminates human error
- So each biscuit is identical every time
- Effective cost control

Baking

- Controls conveyor belt speed through ovens
- Maintains an even / correct temperature in ovens
- Cooked for the same time/alert
- To ensure an even colour/not overcooked or undercooked/properly cooked
- Controls humidity
- Cooling

Coating

- Deposits an accurate amount of chocolate
- Ensures even thickness of chocolate across biscuit
- Consistent appearance in each batch
- Cost control
- Controlling temperature of chocolate/consistency
- Cooling

**Do not credit for repeated points** (3x1) [3]

(c)

- Cutter
- Template
- Roller
- Roller with blades
- Depositor
- Moulds
- Appropriate checks e.g. visual
- Stamping machine

(2)

(2x1)

(d)

- Sunken fruit/fruit at bottom/ uneven distribution of fruit
- Less fruit
- Uneven slices
- Small/slightly smaller/unrisen/flat
- Poor texture/soggy/heavy

(2x1)

[2]

**[Total: 10]**

5 (a)

Chunky vegetables	<ul style="list-style-type: none"> <li>• Increase the size of vegetable dice</li> <li>• Chop or slice vegetables larger</li> <li>• Use fresh tomatoes instead of tinned</li> <li>• Do not slice so small</li> </ul> <p>Do not accept reference to quantity e.g.increase</p>
Spicy flavour	<ul style="list-style-type: none"> <li>• Add more spices /any named spice</li> </ul>
Tomato flavour	<ul style="list-style-type: none"> <li>• Increase the amount of tomatoes</li> <li>• Add tomato purée / sauce / ketchup</li> <li>• Add passata</li> <li>• Reduce amount of water</li> <li>• Add better quality tomatoes</li> <li>• Add/use fresh tomatoes</li> </ul>

Credit one point for each identified area of improvement

(3 x 1)

**[3]**

(b)

- Check that the product matches the specification
- Match the product against competitor's products
- Identify areas for improvement
- Determine whether the consumer likes it/find out what the consumer wants
- Test shelf-life
- Check standards throughout production

(2 x 1)

**[2]**

(c)

- Chopped chutney
- Sultanas
- Desiccated coconut
- Slices of lemon
- Chopped apple
- Sliced banana
- Chopped onions
- Popadums
- Naan bread/pitta bread/other suitable bread product
- Rice
- Yogurt(minted)
- Cucumber/raita
- Tomato

**Do not accept water or other beverages****Do not accept serve hot/chips****[1]**



(d)

- Requires no defrosting time
- Nutritional value retained
- **Can** have a good quality appearance/colour/flavour/texture/tastes fresh
- Quick(er) /saves time
- Available in single portions/ suitable for people living on their own e.g. pensioners
- Can be frozen
- No skill required/easy to prepare/cook/make
- Consistent quality/reliable
- Little equipment needed
- Can be cheaper than making
- Convenient
- Suitable for people with busy lifestyles
- Saves clearing up
- Can be eaten out of the container
- Wide variety available
- Little waste/portioned size
- Saves energy in the home

(3 x 1)

**[3]**

**Do not accept 'easy to store' unless qualified**

**Do not accept if simply states 'cheaper.' Accept if qualified e.g. cheaper than buying raw ingredients**

(e) Accept **either** conduction **or** radiation

**[1]**

**Total: [10]**



**Mark Scheme 1954/4**  
**June 2005**

1 (a) (i) Hazard Analysis Critical Control Point (2 x 1) [1]

(ii)

- Identifies points where hazards can occur
- Checks the food at critical points
- Fulfilling requirements of legislation/comply with law
- Assesses hygiene rules and regulations in work place
- Correct uniform/hair/jewellery
- Personal hygiene/clean nails/wash hands
- Set up systems/procedures for workers to follow
- Safe and hygienic environment
- Preventing (cross)contamination/food poisoning
- Package food safely
- Label food correctly
- Coding of batches
- Correct storage/temperature control
- Correct transportation/temperature control
- Taking/analysing/keeping samples
- Data records

[2]

(b) Weighing

- To ensure each biscuit has the same amount of ingredients/weight accuracy
- To ensure consistency every batch
- Eliminates human error
- So each biscuit is identical every time
- Effective cost control

**Baking**

- Controls conveyor belt speed through ovens
- Maintains an even/correct temperature in ovens
- Cooked for the same time/alert
- To ensure an even colour/not over cooked/undercooked/properly cooked
- Controls humidity
- Cooling

**Coating**

- Deposits an accurate amount of chocolate
- Ensures even thickness of chocolate across biscuit
- Consistent appearance in each bath
- Cost control
- Controlling temperature of chocolate/consistency
- Cooling

**Do not credit for repeated points**

(3 x 1)

[3]

(c)

- Cutter
- Template
- Roller
- Roller with blades
- Depositor
- Moulds
- Appropriate checks e.g. visual
- Stamping machine

(2 x )**[2]**

(d)

- Sunken fruit/fruit at bottom/uneven distribution of fruit
- Less fruit
- Uneven slices
- Small/slightly smaller/unrisen/flat
- Poor texture/soggy/heavy

(2 x 1) **[2]**

**[Total: 10]**

## 2 (a)

Chunky vegetables	<ul style="list-style-type: none"> <li>• Increase the size of vegetable dice</li> <li>• Chop or slice vegetables larger</li> <li>• Use fresh tomatoes instead of tinned</li> <li>• Do not slice so small</li> </ul> <p>Do not accept reference to quantitye.g.increase</p>
Spicy flavour	<ul style="list-style-type: none"> <li>• Add more spices/any named spice</li> </ul>
Tomato flavour	<ul style="list-style-type: none"> <li>• Increase the amount of tomatoes</li> <li>• Add tomato purée/sauce/ketchup</li> <li>• Add passata</li> <li>• Reduce amount of water</li> <li>• Add better quality tomatoes</li> <li>• Add/use fresh tomatoes</li> </ul>

Credit one point for each identified area for improvement

(3x1)

[3]

## (b)

- Check that the product matches the specification
- Match the product against competitor's products
- Identify areas for improvement
- Determine whether the consumer like it/find out what the consumer wants
- Test shelf-life
- Check standards throughout production

(2x1)

[2]

## (c)

- Chopped chutney
- Sultanas
- Desiccated coconut
- Slices of lemon
- Chopped apple
- Sliced banana
- Chopped onions
- Popadums
- Naan bread/pitta bread/other suitable bread product
- Rice
- Yogurt (minted)
- Cucumber/raita
- Tomato

**Do not accept water or other beverages**  
**Do not accept serve hot/chips**

[1]

(d)

- Requires no defrosting time
- Nutritional value retained
- **Can** have a good quality appearance/colour/flavour/texture/tastes fresh
- Quick(er)/ saves time
- Available in single portions/suitable for people living on their own e.g. pensioners
- Can be frozen
- No skill required/easy to prepare/cook/make
- Consistent quality/reliable
- Little equipment needed
- Can be cheaper than making
- Convenient
- Suitable for people with busy lifestyles
- Saves clearing up
- Can be eaten out of the container
- Wide variety available
- Little waste/portioned size
- Saves energy in the home

(3 x 1) [3]

**Do not accept 'easy to store' unless qualified**

**Do not accept if simply states 'cheaper'. Accept if qualified e.g. cheaper than buying raw ingredients**

(e) Accept **either** conduction **or** radiation

[1]

**Total: [10]**

3 (a)

- Talk to supermarket staff
- Look at existing products/supermarket survey
- Questionnaire/survey
- Internet
- Market research-only if qualified

(2 x 1) [2]

(b) One mark for meeting each of two specification points

(2x1) [2]

(c) (i) **Low Sugar**

- Artificial sweetener/named sweetener
- Sugar substitute e.g. fruit puree
- Fresh fruit rather than tinned fruit in syrup
- Tinned fruit in natural juice
- Use low sugar recipe components e.g. sponge
- Avoid foods containing sugar e.g. meringue, biscuits, sponge
- Sugar free jelly
- Sugar free yogurt
- Use diabetic products

**Do not accept (golden) syrup, honey, treacle**

[2]

(ii) **Low Fat**

- Reduced fat biscuits
- Fatless sponge in base
- Low fat yogurt instead of double cream
- Low fat cream
- Low fat margarine
- Low fat/skimmed/semi-skimmed milk
- Fromage frais
- Low fat crème fraîche
- Low fat ice cream

[2]

**One mark for brief explanation****Two marks for a detailed explanation**



(d)

- Computer aided design/computer graphics
- **Product specification**/star profile
- Flow chart
- Photographs/slide show
- Magazine cutting – annotating
- Mood board
- Written report
- Verbal presentation/face to face
- Power point
- Making a prototype

(2 x 1)      **[2]**

**Do not accept 'design specification' or 'specification'**

**Total: [10]**

**4. (i) Storage of high risk foods:**

- Staff training
- Store food in the fridge/chiller/keep chilled/out of danger zone below 8°C
- Regular temperature control checks of equipment e.g. refrigerators
- Store raw and cooked food separately
- Protective packaging/covering food
- Freeze

**Do not accept keep cool/cold  
Accept any temperature up to 8°C**

**(ii) Cross contamination**

- Protective packaging during storage and transport
- Store raw and cooked foods in separate refrigerators/separate areas of fridge
- Use separate (colour coded) equipment
- Keep different work areas for designated tasks
- Clean equipment thoroughly/ disinfect between batches
- Wash hands thoroughly/disinfect between batches

**(iii) Personal hygiene of food handlers**

- Provide clean protective clothing
- Insist on staff removing all jewellery
- Cover all cuts/skin grazes with waterproof dressing
- Provide hair nets/covering
- Provide hot water, anti-bacterial soap and nail brush
- Record any staff illnesses
- Provide staff shower facilities
- Good staff training and refresher courses
- Signs to highlight rules
- Gloves

**Do not credit repeat answers**

**[3]**

(b)

- Ensures all food produced or prepared is safe to eat
- Ensures high standards of hygiene in the food industry/including preparation, supply and sale
- Staff training
- Specific information that must be stated on food labels
- Prevents the sale of food which may be harmful to health/cause food poisoning
- Prevents contamination of food by pieces of metal/pests/chemicals etc.
- Makes sure all food products actually match descriptions or claims made about them
- Requires the food industry to assess the risks involved in food production/setting up HACCP procedures
- Requires high risk food is kept at temperatures below 8°C or reheated food is served hot at above 63°C
- Describes the information that should be on a food label/is honestly presented
- Microbiological sampling/analysing
- Premises inspected regularly
- Checks and procedures must be set up and monitored
- Risks must be assessed and hazards identified
- Legislation is enforced by EHO/ Trading Standards Officer
- Food must be safely prepared, processed, manufactured, packaged, transported, distributed and sold
- Equipment, machinery, storage equipment, transport equipment must maintain food safety

**Up to 5 marks for detailed explanation of 2 points**

**[5]**

**(c) Role of the Environmental Officer is to:**

- **Enforce** the Food Safety Act/legislation
- **Investigate** food poisoning outbreaks
- Give **advice** on safe food preparation/effective cleaning procedures
- **Inspect food premises** regularly
- Suggest improvements
- **To enforce improvement**
- Run Food Hygiene **courses**
- **Condemn** unsafe food and stop it from being sold
- Ensure food is fit for human consumption
- **Close down** unfit food premises
- **Inspect food** at ports/slaughter houses to see that it is safe to eat
- Remove food samples for testing (2 x 1) **[2]**

**[Total: 10]**

## 5 (a)

- In separate compartments so that taste is not influenced by the views and reaction of others
- Samples are coded randomly so that it is not easy for the taste tester to guess the order
- Drinking water/plain biscuit provided to refresh the palette between samples
- Place food on identical containers
- Serve all samples at the same temperature
- Do not give taste testers too much to taste otherwise the taste buds get tired
- Set up a special, quiet, well-lit tasting area where they should not be allowed to talk to share ideas
- Provide the testers with clear instruction on how to taste the food and fill in any charts.
- Use of coloured lights/blindfolded
- Only one type of food to be tested
- Use equal quantities of food for each tester

2 x 1 mark for condition

2 x 1 mark for reason

[4]

## (b)

- Evaluating existing products
- Meets specification
- Identify weaknesses and areas that need improvement/modifying
- Stops development of sub-standard product in early stages so saving resources e.g. time and money
- Assess consumer reaction
- Allows manufacturer to select one product for small scale production run
- Quality assurance – makes sure each batch is the same
- Check standards of quality throughout production/several times
- Test the shelf life to ensure eating qualities are maintained
- As part of the evaluation of the product

**Up to 6 marks for a well explained developed answer**

[6]

[Total: 10]

# **Report on the Components**

## **June 2005**

### **Chief Examiners Comments**

During the assessment of the Specification the standard achieved by many candidates in both the coursework and examination papers remains encouraging.

Generally, responses in both the foundation and higher tier papers clearly indicate that Centres are preparing their candidates' effectively for the final examination with many answers reflecting a thorough understanding of the subject content. The weakest responses in all papers, were seen in questions requiring candidates to give an explanation of their answers, and in the higher tier paper, questions, related to the new subject content of the Specification. Highlighting key words in a question would help candidates focus on the requirements of the question, as would, careful reading of the questions before attempting to offer a response.

It was again very encouraging to note the general reduction in the volume of work produced for the Coursework Project this year and the number of candidates who are now showing excellent use of ICT in their work. Evaluations in Assessment Objectives 2, 3 and 4 and consideration of the possibilities and implications of quantity manufacture are generally the weakest areas within the coursework project. Many Centres are still not advising candidates to design a Product Specification at the conclusion of Assessment Objective 4. Careful note must be taken of the detailed report on coursework as some candidates are still completing sections of work that are no longer required but omitting other aspects as required by the Specification.

### 1954 Paper 1 and 2 General comments

The overall performance of candidates was good. The standard for the foundation paper was higher than last year and the standard for the higher tier was similar to last year. There is however some evidence of candidates being entered for the wrong tier. Some candidates continue to repeat part of the question in their answer therefore they have insufficient space to complete detailed responses.

On the foundation paper most candidates attempted all the questions. Towards the end of the question paper their answers lacked detail to enable them to score high marks.

On the higher paper many candidates achieved high marks for the first three questions, but their level of knowledge of the topics covered in questions 4 and 5 resulted in much lower marks. Question 4 related to work which will have been covered in their coursework. Centres must remember that coursework can be examined in the written papers.

On the higher paper candidates need to spend longer reading the question so that they write from the correct point of view. Some candidates wrote from the consumers view point when the question stated the manufacturer and vice-versa. When questions ask candidates to explain or discuss, simply writing a statement is a low level of response with marks being awarded accordingly.

The quality of drawings in the design based questions has improved. Those candidates who made use of colour and annotation seemed to spend longer on the questions and their scores were notably higher. Candidates should be encouraged to make use of colour when completing design questions.

#### Foundation Paper 1954 / 01 Comments on individual questions

##### Question 1

- a. Most candidates scored at least one mark. This was well answered by the majority of candidates.
- b. Most candidates scored two marks. A number of candidates repeated brown bread which did not score any marks.
- c. The majority of candidates answered this question correctly. Weaker candidates confused personal and kitchen hygiene.
- d. Nearly all candidates knew how to store the sandwiches.
- e. Most candidates scored at least one mark. Weaker candidates repeated the same answer using different words.

##### Question 2

- a. The majority of candidates scored marks on this question. Some candidates were not specific about the conditions for storing the pasta and wrote cupboard. This did not score any marks
- b. Many candidates did not know the operating temperature of a refrigerator. Many candidates had minus temperatures and a surprisingly large number of candidates had temperatures above 8°C.
- c. Some good answers were seen, with candidates referring to chill cabinets being tampered with, not working correctly.

- d. The majority of candidates answered this question correctly.
- e. Quite a lot of candidates scored only one mark. They were vague in their responses.
- f. This was answered very well the most popular answer being thermometer.

### **Question 3**

- a. Most candidates scored highly. Candidates who made use of colour and annotated their designs fully scored highly and used their information for part b.
- b. More able students scored high marks and clearly related their answers to part a. Many candidates did not say what textures the salad was providing or which colours the ingredients provided. A few candidates were not aware of ingredients which contained vitamin c.
- c. Most candidates scored well on this part of the question. The most popular answers being taste testing in supermarkets, on television and in magazines. Lower ability candidates simply said by advertising. This did not score any marks.

### **Question 4**

- a. More able students scored highly on this question. They clearly used knowledge from their coursework. Less able students did not attempt this part of the question.
- b. Candidates who answered the question correctly made reference to the pies being cooked at the same temperature, for the same amount of time, the use of visual checks, and using depositors to ensure the same amount of filling was used. However many candidates referred to using the same ingredients or the same amount of ingredients and did not score marks.
- c. The most popular response was to recycle. Many candidates missed out on marks as they answered from the manufacturer's point of view and not the consumers.

### **Question 5**

- a. This was well answered by the majority of candidates. A few candidates failed to score marks as they referred to the product as being high in energy.
- b. This was well answered by many candidates who made reference to low-fat, calorie controlled diets. Many mentioned other specific diet, being able to make informed choices, comparing it to other products. Weaker candidates mentioned cooking instructions and suitability for buying and freezing which did not score marks.
- c. The most common correct answer was to thicken. More able candidates wrote about gelatinization of starch and syneresis.
- d. More able candidates scored two marks however they were often unable to explain their answers. The most common responses related to change, modifying, meeting the specifications.



## **Higher Paper 1954 / 02**

### **Comments on individual questions**

#### **Question 1**

- a. More able students scored highly on this question. They clearly used knowledge from their coursework. Less able students did not attempt this part of the question.
- b. Candidates who answered the question correctly made reference to the pies being cooked at the same temperature, for the same amount of time, the use of visual checks, and using depositors to ensure the same amount of filling was used. However many candidates referred to using the same ingredients or the same amount of ingredients and did not score marks.
- c. The most popular response was to recycle. Many candidates missed out on marks as they answered from the manufacturer's point of view and not the consumers.

#### **Question 2**

- a. This was well answered by the majority of candidates. A few candidates failed to score marks as they referred to the product as being high in energy.
- b. This was well answered by many candidates who made reference to low-fat, calorie controlled diets. Many mentioned other specific diet, being able to make informed choices, comparing it to other products. Weaker candidates mentioned cooking instructions and suitability for buying and freezing which did not score marks.
- c. The most common correct answer was to thicken. More able candidates wrote about gelatinization of starch and syneresis.
- d. Most candidates scored two marks however they were often unable to explain their answers. The most common responses related to change, modifying, meeting the specifications.

#### **Question 3**

- a. Most candidates were able to correctly identify the function of SR flour and sugar. Margarine and eggs were less well answered.
- b. The majority of candidates scored at least one mark. Saving time was the most common answer. Candidates who made reference to it being cheaper often did not qualify how it was cheaper.
- c. There were some very good drawings with excellent annotation and use of colour. The more able candidates drew a novel shape with a birds eye view and a cross section. Almost all candidates gained marks for novel and decoration with candidates making use of icing and sweets. Using a combination of flavours and textures was not always clearly addressed. Many candidates work only showed one flavour. Textures were often not discussed or their designs just referred to texture in general and were not specific. Many wrote 'my cake will have different textures' and therefore did not score any marks.

#### **Question 4**

- a. Most candidates were able to explain briefly what a design specification was. Many mentioned a list of factors and gave an example. Product specification was not as well

answered and many candidates repeated their answer for design specification using different words and the same examples. More able candidates wrote about the product specification develops from the design specification. Some candidates achieved marks because they clarified how detailed / exact / precise it should be.

- b. This was not very well answered by many candidates. Many candidates paraphrased / copied information from the question. Where candidates scored highly they explained the importance of the product specification criteria and often included examples to back up their statement. Candidates were not awarded marks if they just gave lists e.g. a list of different cooking methods.

### **Question 5**

- a. Many candidates did not relate their answer to the manufacturer's perspective therefore did not score marks. Those who scored usually related their answers to the shelf life of the product, foods not being wasted and enough time for transport and selling food.
- b. Many candidates did not have an understanding of the functions of preservatives, antioxidants and emulsifiers and stabilisers. Candidates often made very vague statements. This is the A\* question and responses need to be clear.

Candidates who scored marks for antioxidants were able to relate their answers to fats going rancid or preventing fruits from going brown.  
Emulsifiers and stabilisers – the most common correct answer related to separation of ingredients with mayonnaise being an example.

- c. Many candidates showed an understanding of the use of additives in food products but usually this was not answered from the manufacturer's point of view so candidates did not score many marks in this section. Candidates need to be encouraged to underline the key words in the question to help them focus on what is required.

## GCSE Food Technology - 1954 - 03 and 04

### General comments

The level of preparation of candidates for the Product Analysis question seemed to vary greatly between centres. The design questions were generally quite well done. Some candidates were able to use vocabulary effectively, but many of the weaker ones were unable to spell very basic terms such as “fridge”.

#### Foundation question 1

a) Many gained full marks. Some candidates listed advantages of the packaging shown in the illustration rather than specifically the *material* listed in the question.

b) Many gained full marks, with “protecting from bacteria” and “keeping the food fresh” amongst the most common responses.

c) Many candidates scored well. However, a large number of candidates wrote a material rather than an appropriate package, so lost marks.

d) The barcode symbol was correctly named by the vast majority. The wording to ii) varied greatly, but the majority of candidates were able to correctly identify it. Many incorrectly thought it was a recycling symbol.

#### Foundation question 2

a) Most candidates correctly stated the reasons for using flour and salt / pepper in the sauce. Many named two appropriate savoury foods which would add colour, but some named sweet foods.

b) i) A very large number of candidates named two appropriate dishes, with Spaghetti Bolognese, lasagne and pizza being amongst the most common.

ii) A wide range of answers were given with many candidates achieving 3 marks. Many specified that ready-made sauces *are* cheaper or tastier or better etc. without qualifying it.

c) The majority of candidates stated that the ready-made sauce should be stored in the fridge once open, with the most common incorrect response being “in a cool, dry place.” Perhaps they had failed to notice “once opened”?

Foundation question 3

a) Many candidates achieved 2 marks. Questionnaires/ surveys / interviews / existing products were the most popular responses.

b) Many only achieved 1 mark. Identifying consumer preferences / needs / likes were the most popular answers.

c) This was generally well answered, although a large number gave answers that were deemed too vague to warrant a mark e.g. 'on a computer', 'in a chart'.

d) Many candidates were able to give valid reasons, with 'instead of having cereal and milk for breakfast' and 'to eat on the go' both being very popular answers. Quite a number of candidates gave the response 'because they are healthy' but this was felt to be incorrect as the vast majority of these bars contain lots of fat and sugar.

e) The design question was mainly well done, with a large number of candidates meeting all three specification points. Some candidates used vague terms 'fruit' and 'cereal' which were not acceptable: it was essential to name a specified food material. The majority of candidates actually drew their design, although some drew a wrapper for a cereal bar, rather than the bar itself. Some had annotated their diagrams to explain the function of the food materials. A large number of candidates incorporated milk into their designing, stating that it was to provide fibre. Some candidates repeated the diagram rather than designing a cereal bar.

Foundation question 4

a) i) Only the minority of candidates correctly stated what HACCP stands for, with many imaginative guesses!

ii) Many candidates were able to identify two ways HACCP is used, but there was lots of confusion, with vague, woolly answers. The majority of correct answers focused on identifying hazards, ensuring a safe environment, personal hygiene and preventing cross-contamination.

b) The understanding of the use of CAM was good from many centres, with a large number of candidates achieving full marks. Some candidates repeated general reasons e.g. "to be more accurate".

c) Many candidates achieved only one mark for this section, the vast majority only being able to correctly identify a cutter as being a way of ensuring consistency. Some gave vague answers such as "shapers" and tools". A number simply stated 'CAM' as their second point, but this was felt to be too vague and could have been lifted from the previous question. Credit was given only for specific methods. A good number of candidates gave 'visual checks' as a response.

d) The majority of candidates were able to correctly identify two faults in the loaf and achieved full marks.

Foundation question 5

- a) Many candidates got 2 marks for this question: correctly identifying a way of increasing the spicy flavour and the tomato flavour. Many failed to pick up the mark for chunky vegetables, with many incorrect answers focusing on the quantity of vegetables used, rather than the size of the pieces. Many did not interpret the information from the star diagram correctly, recommending that the size of the vegetables should be made smaller or that the amount of spice should be reduced.
- b) The quality of responses varied widely. Common responses were “to find what customers like” and “to find out what needs improving”.
- c) Many failed to answer this question correctly, with “on a plate”, “serve hot” and “leave to stand before serving” all being common answers. “Rice” was by far the most common correct answer.
- d) Many did well on this question, though as earlier, some made generalisations such as “are cheap”, “are good quality” etc. Ease of preparation was amongst the most popular answer.
- e) This question was not answered well and seemed to be dependent on the centre the candidate was from. Many attempted to explain how a microwave works.

Higher question 1

- a) i) A large number of candidates correctly stated what HACCP stands for.
- ii) Many candidates were able to identify two ways HACCP is used, but there was lots of confusion, with vague, woolly answers. The majority of correct answers focused on identifying hazards, ensuring a safe environment, personal hygiene and preventing cross-contamination.
- b) The understanding of the use of CAM was good from many centres, with a large number of candidates achieving full marks. Some candidates repeated general reasons e.g. “to be more accurate”.
- c) Many candidates achieved only one mark for this section, the vast majority only being able to correctly identify a cutter as being a way of ensuring consistency. Some gave vague answers such as “shapers” and tools”. A number simply stated ‘CAM’ as their second point, but this was felt to be too vague and could have been lifted from the previous question. Credit was given only for specific methods. A good number of candidates gave ‘visual checks’ as a response.
- e) The majority of candidates were able to correctly identify two faults in the loaf and achieved full marks.

Higher question 2

- a) Many candidates got 2 marks for this question: correctly identifying a way of increasing the spicy flavour and the tomato flavour. Many failed to pick up the mark for chunky vegetables, with many incorrect answers focusing on the quantity of vegetables used, rather than the size of the pieces. Some did not interpret the information from the star diagram correctly, recommending that the size of the vegetables should be made smaller or that the amount of spice should be reduced.
- b) The quality of responses varied widely. Common responses were “to find what customers like” and “to find out what needs improving”.
- c) Many failed to answer this question correctly, with “on a plate”, “serve hot” and “leave to stand before serving” all being common answers. “Rice” was by far the most common correct answer.
- d) Many did well on this question, though as earlier, some made generalisations such as “are cheap”, “are good quality” etc. Ease of preparation was amongst the most popular answer.
- e) A reasonable number were able to answer this correctly.

Higher question 3

- a) This was generally well answered, although some gave questionnaire and survey as two answers.
- b) The vast majority of candidates gained two marks. Many diagrams were done to a good standard and were annotated in some detail. Some were coloured.
- c) It was apparent that many candidates could not distinguish between fat and sugar, with a lot of confusion about what foods contain large quantities of each e.g. many wrote about low fat jelly or low sugar cream. Many talked about “natural sugar in the fruit”. Many gained only one mark as their explanation was done in insufficient detail.
- d) This question was not answered well. “Making the product” and “written report” were common responses. Many stated CAM rather than CAD. Many suggested brainstorming. Many answers were vague.

Higher question 4

- a) Many candidates answered this section well and there was clear evidence of thorough teaching in some centres. The majority of candidates provided two separate points for high-risk foods and cross-contamination, although there was some repetition and consequent loss of marks. Many candidates identified correct temperature ranges. Marks were lost with iii) because candidates failed to put it into an industrial context, giving answers such as “wash your hands before touching food.” The emphasis of the question was clearly on how a *manufacturer* reduces the risk of food poisoning.
- b) This was generally not at all well answered, with many candidates repeating points made in section a). There were very few real quality responses and very few candidates seemed to have any real knowledge of food legislation.
- c) Many achieved two marks with this. The vast majority stated that the EHO checks premises and can close them down. Very few other points were mentioned.

Higher Question 5

- a) Many candidates showed a clear understanding of how sensory analysis should be carried out and the reasons for the control measures. Many answers were clearly explained. On most occasions where a correct control measure was identified, the candidate went on to give the correct reason for it. "Individual booths to prevent communication between tasters" was amongst the most common example.
- b) This was generally not well answered. "To see what needs improving" and "to gain views" were highly common responses.

## **1954/05 Coursework**

### **General Comments**

Generally folders are continuing to become more concise and organised with divider pages between each objective. However, some candidates are still including vast amounts of irrelevant research and aspects of the coursework, which are no longer a requirement for the Specification.

Overall, the standard of coursework projects this year varied little from last year. Moderators saw some excellent coursework projects from centres that had obviously fully understood the requirements of the specification. However there still remain a number of centres that are unclear as to the requirements of certain Assessment Objectives, resulting in coursework projects of a much lower standard.

The Specification requires candidates to produce a product that can be batch produced and marketed. As the Specification states that the product should be suitable for batch production, Candidates are not required to consider the different Commercial Production Methods in Assessment Objective 2. However candidates are required to discuss why batch production is a suitable method in Assessment Objective 4.

When developing the product the candidate needs to consider the implications for quantity manufacture. This should involve the candidate in the development and use of a control system that will ensure consistency over a small batch production run.

It is not sufficient for the candidate to merely talk about how this could be done or how industry would do it. The candidate must be involved in this to score the higher mark ranges in Assessment Objective 4 and Assessment Objective 6, where the candidate is asked to analyse the performance of the product and the planned control system in the manufacture of the product.

Tasks have, in the main continued to be suitably worded, allowing candidates the opportunity to design and make a quality Food Technology product. However, there was evidence this year of some centres using tasks that were too prescriptive therefore preventing candidates the opportunity to investigate the situation or the user. Reference to industrial / commercial practices and the application of system and control has continued to improve but some candidates continue to omit the detail required for this important aspect in their Coursework Project.

There continues to be lack of written evidence in some candidates' folders of the adaptations/modifications to the recipes being trailed in Assessment Objective 3. Clearly, this is not within the philosophy of Design and Technology. Candidates should be encouraged to use their own ideas creatively throughout the whole design and make process. There are still a few centres allowing candidates to carry out Assessment Objective 3 purely as a paper exercise, obviously, in centres where this is still happening the number of practical skills the candidate can demonstrate is limited, consequently limiting the number of marks which can be awarded for Assessment Objective 5.

Many candidates are now demonstrating good use of ICT, not only in the production of questionnaires, graphs, packaging designs, photographic evidence, etc. but in word processing the whole folder.

The presentation of work is a very important aspect of the project. To achieve high marks candidates need to present their ideas adeptly in a logical and concise way. An increasing number of candidates are using A4 paper and whilst Moderators saw some very good A3 folders, there are still a number of candidates who present very little information on a page, consequently not meeting the criteria required for presenting the work concisely.



## APPLICATION OF ASSESSMENT CRITERIA

The level of response is an important part of the mark scheme and should be carefully considered when assessing candidate's work. The levels should equate to the quality of the evidence, the capability and depth of involvement that has been employed to produce what is on offer. Within an Assessment Objective, the quality of evidence to fulfil a particular level of response at a lower level must be very different from the evidence that might fulfil a similar level of response at a higher level. The capability and depth of involvement must be evident to gain the marks at the higher level. The mark scheme continues to be misinterpreted by a number of centres. Moderators once again noted an increase in the number of candidates using structured proforma sheets produced by teachers. Whilst these are useful for some candidates they limit the initiative and individuality often shown by high-attaining candidates.

Generally, candidates' coursework folders continue to be more organised with each Assessment Objective being clearly divided but there are still a number of centres that do not encourage this practice making the moderation process more difficult. Dividing each Assessment Objective clearly helps the candidates understanding of what is required. Where a prepared version of the mark scheme is also included to be used alongside the submission, the candidates' understanding and control of the project seems to be further enhanced.

Marking at the completion of an Assessment Objective (wherever possible) also clearly provides encouragement and the opportunity for the candidate to improve their work. Moderators were very appreciative of the Centres who had annotated the work in detail. This greatly assisted the moderation process.

The procedures for annotation of candidates' work are outlined in paragraph 7.4 of the specification.

'The sample of work which is submitted to the Moderator for moderation must show how the marks have been awarded in relation to the internal assessment objectives defined in Section 7.3 of the specification.

Where it is not clear within a coursework project folder, by the candidates' own presentation of work, where the marks have been awarded, annotation must be carried out by the person marking the work.

A separate cover sheet containing reference to the criteria applied and their location within the project is recommended.'

There must also be written teacher comments of the practical work carried out during Assessment Objectives 3, 4 and 5, and a photograph of the final product. When this is included, it is helpful in checking marks for Assessment Objective 5, particularly for the lower attaining candidates where there is little written evidence in their folders. There are still too many centres sending work without teacher comments and although there was an increase in the number of centres making good use of a digital camera, a few centres are still providing very little evidence of the practical marking, in some cases only a final mark was given, without the necessary photographic evidence. This clearly does not help the moderation process.

## ASSESSMENT OBJECTIVE 1

Generally, this Assessment Objective was reasonably well addressed. Some candidates had given a good concise response when considering the user and the situation before arriving at a clear design brief for a marketable product.

However, some centres are crediting candidates with full marks when there is little supportive evidence for the choice of the design brief.

There is still evidence in some folders of starting this Assessment Objective with the design brief before proceeding to carry out the research.

A high level of response to this section would include candidates in:

- carrying out the necessary research to provide a detailed description of both the situation and the user(s) e.g. through questionnaires, statistical information. Questionnaires should be structured so they allow candidates to identify a need/opportunity; target group;
- providing a detailed analysis of the results in order to identify the need/opportunity, target group, which then leads to a clear and precise design brief of a marketable product.

In some Centres candidates tended to offer information which was not specific to the task and/or showed little evidence of consideration of the user and the situation, resulting in rather vague briefs, with no reference being made to the research. This would be regarded as a low level of response.

The final product needs to be one that can be sold 'off the shelf' and the many candidates are now adhering to this by including the word 'marketable' in their design brief. A few candidates this year had presented their design brief as a long and wordy "mini-specification", whereas others had been too specific e.g. "design and make a pizza" therefore limiting the marks that could be achieved in the following assessment objectives. Candidates need to be encouraged to present a clear and concise design brief. Centres are advised to include a copy of the task at the beginning of each candidate's work.

For the Short Course;

- The questionnaires do not need to be distributed to a very large group of people, this in turn will reduce the work required when analysing responses.
- The design brief could be a little more focussed from the outset. This would allow the investigation and generation of design solutions to be more focused (Assessment Objectives 2 and 3) which in turn will reduce the complexity of the work required for Product Development (Assessment Objective 4). However care must be taken not to limit the range of practical skills that the candidate can demonstrate.

## ASSESSMENT OBJECTIVE 2

Research into the design brief, which results in a specification, needs to be explained carefully to candidates. It is essential that they have sufficient direction and focus for their work through an analysis of what needs to be done so that data identified and collected is relevant to the design brief.

Candidates had identified and collected data, and there are clear signs that some candidates are becoming more selective in the information they include in this section of their work.

Information on HACCP and industrial production methods is no longer a requirement of this objective, but candidates do need to consider environmental issues.

The standard of work produced with regards to evaluation of existing products still continues to remain the weakest area in this Assessment Objective. Candidates are evaluating existing products through a range of techniques, e.g. group activity, visit to the supermarket, but they do not always evaluate these products against the needs identified through market research even though their evaluations are detailed and sometimes the products selected for evaluation are not relevant to the chosen task. In some cases products are evaluated in the

form of a table but there are no conclusions drawn from the results. There is no longer a need to evaluate the packaging of the products.

Sometimes, questionnaires were far too general – i.e. not specific to the target group or relevant to the brief and results were not always analysed or used to influence the development of the specification and the choice of trailed products. Although there was evidence that specifications have improved this year, there is still great variation in the quality overall. Some candidates produced very detailed specifications, which covered all the required aspects, whilst other specifications were far too brief and in some cases, they tended to be teacher led. In a few cases the Specification borne no relation to the data recorded in Assessment Objectives 1 and 2. Criteria relating to packaging no longer needs to be referred to in the Specification.

Making reference to a system to ensure control over the production of the product in quantity is still being omitted from the specification by a number of candidates.

A high level of response to this section would involve candidates in;

- fully examining the intended use of the product with relevant data identified and collected;
- carrying out market research to identify users' needs;
- identifying and evaluating existing products against the needs of the intended user(s);
- analysing all the research before developing a detailed specification that shows consideration of a system to control production of the product in quantity.

For the Short Course:

The number of existing products to be evaluated does not need to be too extensive, but the products chosen must be relevant to the design brief and must be evaluated in depth.

### ASSESSMENT OBJECTIVE 3

It is important within this assessment objective there is evidence of:

- forward planning;
- teacher comments on the practical work;

so that marks can be awarded to Assessment Objective 5.

Some candidates are trailing the required number of products for Assessment Objective 3, with only a few Centres carrying out the work as a paper exercise. However some candidates still continue to choose products that show little or no skills, or only allow them to show the same skills, therefore limiting their level of achievement in Assessment Objective 5. A number of centres are still failing to encourage their candidates to adapt or modify original recipes to fit their design specification and to record the proposed changes. Candidates are not required to write out the method of making or give a list of equipment for each product.

The standard of forward planning continues to be varied. Many centres had not encouraged candidates to show evidence of forward planning and sometimes when this was completed, plans were far too superficial. Candidates need to show evidence of planning so marks can be awarded in Assessment Objective 5.

Some candidates had trailed and tested a wide range of interesting solutions, with candidates being prepared to experiment with new flavours and combinations of ingredients. There was evidence of star diagrams/profiles and rating charts but the results were not always explained and conclusions drawn. Detailed evaluations of solutions against the specification still remains a weak area for many candidates. Evaluations were often cursory with only a ticked chart. This cannot be considered as detailed evaluation. Some candidates had evaluated each solution but had not made any reference to the specification.

Nutritional analysis of the trailed products was varied. In some centres this was well done whereas in others there was very little evidence of any analysis. Many candidates are still not making any reference to this analysis in their evaluations. Nutritional analysis for this assessment objective only needs to be carried out if it is appropriate to the design brief.

Costing of products continues to be an area that needs further improvement. Costing is being carried out in the majority of Centres but often it is done superficially and not referred to during evaluations.

Packaging designs are not a requirement and therefore can not be credited with any marks.

Explanation of the final design proposal is still a weak area in many candidates work. Some candidates had given well thought out and detailed proposals but in other projects there was no evidence of a proposal. A number of candidates had stated why they were going to develop a product but had not explained other ideas had been rejected.

However, moderators did see some quality work from some Centres for Assessment Objective 3. It was pleasing to note that some candidates had continued to use a wide range of appropriate techniques to present their design solutions.

A high level response to this section would involve candidates:

- Proposing a wide range of appropriate solutions – 3 for the Short Course, 4 (if the products are complex) to 6 for the Full Course, with detailed evaluation against the specification, consideration of the need and fitness for purpose.
- Using a wide range of appropriate techniques to present solutions.
- Giving detailed evidence to support choice of final design proposal and explaining why other possible solutions were rejected.

#### ASSESSMENT OBJECTIVE 4

There was again great variation in the standard of work submitted for this objective. Some centres have now adapted effectively to the specification with all the required elements achieved. In Centres where this Assessment Objective was done well, candidates showed detailed: -

- trailing and testing with all modifications/adaptations to the product clearly explained with reasons - for example, changes to: - ingredients, shape, size, decorations, coatings, cooking methods.
- evaluations highlighting the success/failure of the modifications and any further changes needed to ensure success before arriving at detailed explanations for their final decisions. Costing and nutritional analysis was evident although once again these were not always referred to in the evaluations. Nutritional analysis during the development of the product is only required if appropriate to the brief but all candidates need to analyse the nutritional content of their final product.

There are still many centres who do not fully understand that this Assessment Objective requires candidates to trial and test their chosen design solution and to use evidence gained from the comments in objective 3 and during the developmental work in objective 4 to suggest further modifications to the product. Some candidates developed more than 1 product and others who did carry out developmental work on 1 product, showed lack of consideration to tester's opinions throughout the trailing process. A number of candidates decided on developments at the beginning of Assessment Objective 4 so the product did not develop as a result of evaluated opinions. Evaluations in this objective often lacked the necessary detail to be awarded high marks.

In some centres developmental work did not always lead to a final product as candidates chose one of their developments and referred to this as their final product. In other centres, candidates were not encouraged to modify/adapt their product but moved straight to the final product.

Reasons for choice of materials was weak in some centres, a lack of understanding of the functional properties of ingredients was clearly evident.

In some Centres, it was evident that candidates had carried out Product Development (because of teacher comments about the practical work) but there was no written evidence of this work in candidates' folders. Where there were no teacher comments it was sometimes difficult to determine whether candidates had in fact carried out any product development.

Written evidence of an effective control system for the product was evident in many candidates' projects, although some candidates are still producing controls that are vague and not specific to the product. A control system for the packaging is no longer a requirement.

Consideration of the possibilities and implications of quantity manufacture, when it is done well, shows that candidates have a good understanding of the requirements for this section of the project, but overall this still remains a weak area in many centres. Frequently, projects reflected lack of understanding and evidence of scaling up, accurate costing of the final product and quantity manufacture did not always refer to batch production or the possible use of pre-manufactured components. More centres are now producing a product specification. However the quality of these varies greatly. In some centres there is little distinguish between the design and product specification.

It is important that within this assessment objective there is evidence of;

- teacher comments on the practical work so that marks can be awarded to Assessment Objective 5.

A high level of response to this section would involve candidates:

Carrying out the appropriate testing and trailing – (development on at least one occasion for the Short Course, with the second occasion being the final product. Development on at least two occasions for the Full Course, with the third occasion being the final product. ) to:

- identify necessary modifications for the product to meet the design brief;
- arrive at reasoned decisions about materials, production methods and manufactured items.
- Providing full details about the final solution and an effective control system for the product to be produced in quantity manufacture.
- Considering the possibilities and implications of producing their product in quantity.

## *Report on the Components taken in June 2005*

- Designing a detailed product specification.
- Using a wide range of appropriate techniques to present the final solution.

Centres who had given clear guidance to candidates scored well in this Assessment Objective.

### ASSESSMENT OBJECTIVE 5

In the best submission, forward planning was thorough and specified an effective order of work (Assessment Objectives 3) and the flowchart for the final product was detailed. High marks cannot be awarded if forward planning is missing from Assessment Objective 3.

Some candidates are producing products that demonstrate a wide range of skills, but it is noticeable that in some centres, candidates are continuing to be credited highly without evidence of this range of skills or for a few products. Lack of teacher comments for the practical work, teacher records which are incomplete or do not correspond to the work documented in the candidate's folder, or when the mark given does not match the annotation of the practical sessions, do not assist the moderation process. There are still too many Centres providing little or no written comments.

The wider use of digital cameras has allowed more candidates to include photographs of their work in Assessment Objectives 3, 4 and the final product. However some centres are reminded that the minimum requirement is a photograph of the final product.

A final design proposal for the packaging was evident in many candidates' projects but often these were not presented to a high standard. Some candidates' design lacked colour and detail, being no more than a net with spaces for nutritional information etc. therefore were incomplete. Candidates cannot be awarded full marks for the quality of the final product if the packaging is incomplete.

Once again centres are reminded that a model of the packaging is no longer required.

- A high level response to this section would involve candidates:
- Providing evidence of forward planning (Assessment Objectives 3);
- Producing a detailed flowchart, including their control system.
- Being resourceful and adaptable with materials, foods and equipment.
- Independently combining a range of skills and techniques appropriate to the task.
- Showing a high understanding of safe working procedures.
- Producing a product (food and packaging design) to a high standard that meets the requirements of the specification.

### ASSESSMENT OBJECTIVE 6

Moderators noted some good evidence of testing of the final product but conclusions, when included were often superficial and unsupported, resulting in the evaluations being descriptive rather than evaluative. Evaluations against the product specification were a little more evident this year but many candidates are still referring to their design specification from Assessment Objective 2. A few candidates continue to state that their product meets the specification but do not outline reasons for this.

Suggesting proposals for further developments, modifications or improvements for the product needs addressing by some candidates. In some cases this had been omitted, in others the comments were too superficial.

A few centres had misinterpreted the marking criteria for this Assessment Objective resulting in candidates, not confining their comments to the final product. They tended to discuss the use of time and resources for the whole project and, in some cases evaluated each objective in turn. A few centres had awarded marks for this objective to evaluations carried out in objective 3 and 4. Marks should only be awarded for the evaluation of the final product. The evaluation should also include a review of the performance of the control system so it could be used to enable the product to be manufactured in quantity, e.g. what needs to be modified if it was to be used to manufacture say 100 products.

A high level of response to this section would involve candidates:

- Critically evaluating their product against the product specification, initial design brief and use of resources.
- Carrying out detailed testing (more than one person and they should be possible users) with meaningful conclusions.
- Suggesting proposals for further development, modifications or improvements for both the product and control system.

#### GOOD PRACTICE WITHIN ADMINISTRATION OF THE COURSEWORK

It would be helpful if Centres could bear in mind the following points:

- (a) Work should be removed from ring binders, presented so that pages can be turned without having to remove sheets from plastic wallets and securely fastened together e.g. by means of a tag, then clearly labelled with Centre Number, Name and Candidate Number. Mark sheet/annotation sheet should be attached to each piece of work.
- (b) Where questionnaires have been carried out by candidates, only one exemplar questionnaire is needed once the work is called for moderation
- (c) Candidates need to be encouraged to present their work concisely e.g. present graphs on 1 or 2 pages.
- (d) There were far too many clerical errors this year. The transference and addition of marks on the Coursework Assessment Sheets need to be checked thoroughly to reduce the amount of paper work sent to Centres for amendment. If an amend form is sent this should be returned to the Moderator as quickly as possible. An HB pencil should be used to complete the MS1 and teachers' initials should be used to clearly distinguish the different teaching groups.
- (e) The Coursework Assessment Sheet(s) should be sent to the Moderator with the MS1. Centres need to make sure that this paperwork arrives to the Moderator by the date specified by OCR and Coursework Projects should be sent within 3 days of receipt of the request for the sample.
- (f) A copy of the task(s) should be included with the sample.
- (g) Encourage the candidates to divide their work under headings for the separate Assessment Objectives.
- (h) Centres who provide effective annotation greatly help the moderation process. The standard of annotation is improving, but it is still poor and in some cases non-existent.
- (i) Where more than 1 teacher is involved in the assessing of candidates work, the centre should carry out effective internal standardisation to ensure a reliable rank order.

**General Certificate of Secondary Education (Food Technology/Short Course) (1054)  
June 2005 Assessment Session**

**Component Threshold Marks**

<b>Component</b>	<b>Max Mark</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
Paper 1	50			32	28	24	21	18
Paper 2	50	24	20	16	12			
Coursework	105	82	70	59	47	36	25	14

**Syllabus Options**

**Foundation Tier**

	<b>Max Mark</b>	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
Overall Threshold Marks	175				100	84	69	54	39
Percentage in Grade					22.0	29.4	24.3	14.1	5.11
Cumulative Percentage in Grade					22.0	52.0	76.6	91.1	96.1

The total entry for the examination was 347

**Higher Tier**

	<b>Max Mark</b>	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
Overall Threshold Marks	175	129	113	97	81	64	55		
Percentage in Grade		18.4	25.7	28.7	18.2	6.83	1.37		
Cumulative Percentage in Grade		18.4	44.5	73.0	91.5	98.4	99.3		

The total entry for the examination was 461

**Overall**

	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
Percentage in Grade	10.8	15.03	16.76	19.41	16.22	10.90	5.85	2.13
Cumulative Percentage in Grade	10.8	26.2	43.0	63.0	79.3	90.0	95.9	98.0

The total entry for the examination was 808



**General Certificate of Secondary Education (D&T Food Technology) (1954)  
June 2005 Assessment Session**

**Component Threshold Marks**

<b>Component</b>	<b>Max Mark</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
Paper 1	50			32	28	24	21	18
Paper 2	50	24	20	16	12			
Paper 3	50			37	32	28	24	20
Paper 4	50	35	31	27	22			
Coursework	105	82	70	59	47	36	25	14

**Syllabus Options**

**Foundation Tier**

	<b>Max Mark</b>	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
Overall Threshold Marks	175				105	89	73	57	41
Percentage in Grade					30.0	26.0	20.1	13.8	7.02
Cumulative Percentage in Grade					30.0	57.7	78.5	92.3	98.2

The total entry for the examination was 12706

**Higher Tier**

	<b>Max Mark</b>	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
Overall Threshold Marks	175	136	120	104	89	71	62		
Percentage in Grade		11.4	24.9	32.7	20.6	8.16	1.06		
Cumulative Percentage in Grade		11.4	36.6	69.5	90.0	98.1	99.1		

The total entry for the examination was 10631

**Overall**

	<b>A*</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
Percentage in Grade	5.4	11.43	14.97	24.77	17.86	11.40	7.48	3.81
Cumulative Percentage in Grade	5.4	17.3	32.8	58.3	76.8	88.2	95.5	98.6

The total entry for the examination was 23337





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