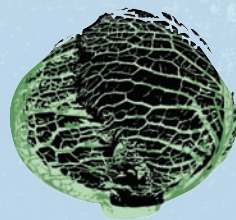
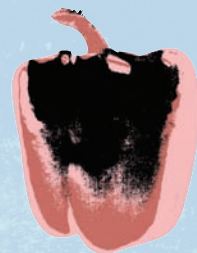


## Sample Assessment Materials

# Edexcel GCSE in Design and Technology: Food Technology (2FT01)

### Inside this Sample Assessment Materials pack you'll find:

- An accessible paper to help you and your students prepare for the assessment
- A clear and concise mark scheme to let you know what the examiners are looking for
- Supported controlled assessment information including sample tasks and assessment criteria to share with students.



# Welcome to the GCSE 2009 Design and Technology: Food Technology Sample Assessment Materials

These sample assessment materials have been written to accompany the specification. They have been developed to give you and your students a flavour of the actual exam paper and mark scheme so they can experience what they will encounter in their assessments. They feature:

- **An accessible paper** using a mixture of question styles. We've worked hard to ensure the paper is easy to follow with an encouraging tone so that the full range of students can show what they know.
- **A clear and concise mark scheme** outlining what examiners will be looking for in the assessments, so you can use the sample paper with students to help them prepare for the real thing.
- **Supported controlled assessment**, including sample controlled assessment tasks to show you the sort of activity students will undertake. Used in conjunction with the guidance in the Teacher's Guide, these tasks will help you manage the controlled assessment in your centre and help students achieve their best.

Our GCSE 2009 Design and Technology: Food Technology qualification will be supported better than ever before. Keep up to date with the latest news and services available by visiting our website:

**[www.edexcel.com/gcse2009](http://www.edexcel.com/gcse2009)**

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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

# Edexcel GCSE

## Design and Technology: Food Technology

### Unit 1: Creative Design and Make Activities

Sample Controlled Assessment Material

Paper Reference

**5FT01/01**

**You do not need any other materials.**

*Turn over* ►

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## Delivery of the controlled assessment

You will design and make a RANGE of **food products**.

In order to complete this task you will undertake the following **design** activity:

Stages	Tasks	Suggested times
1. Investigate	1.1 Analysing the brief	1 hour
	1.2 Research	3-5 hours
	1.3 Specification	1 hour
2. Design	2.1 Initial Ideas	8-10 hours
	2.2 Review	1 hour
	2.3 Communication	Evidenced throughout
3. Develop	3.1 Development	10 hours
	3.2 Final design	1-2 hours

In order to complete this task you will undertake the following **make** activity:

Stages	Tasks	Suggested times
4. Plan	4.1 Production plan	1-2 hours
5. Make	5.1 Quality of manufacture	5 hours
	5.2 Quality of outcome	
	5.3 Health and safety	Evidenced throughout
6. Test and evaluate	6.1 Testing and evaluation	2-3 hours

**Controlled conditions**

Development of the student's design folder and manufacture of the product(s) must take place under controlled conditions. Students will be supervised by a teacher at all times.

Students' work must be collected in at the end of the lesson and handed back at the beginning of the next lesson. Students must produce their work individually.

**Feedback control**

Teachers are allowed to provide regular, formative feedback throughout the creative design process. Student progression should be supported by the centre's own Assessment for Learning (AFL) strategies.

Demonstrations of practical activities are allowed in order to develop knowledge, understanding and skills and to identify health and safety issues relating to specific tools, equipment and processes.

**Collaboration control**

Where group work is carried out, evidence of individual contributions must be clearly identified and recorded.

**Resources**

Access to resources is determined by those available to the centre.

**Quality of written communication**

Quality of written communication (QWC) will be assessed throughout the student's design folder. This will assess students on their ability to organise information clearly and coherently, using specialist vocabulary when appropriate.

## Tasks

Suggested food products are:

1. **Special dietary needs**, eg
  - A range of products for the elderly
  - A range of products for diabetics
2. **Vegetarians**, eg
  - A range of products for lacto vegetarians
  - A range of products suitable for vegans
3. **Sports nutrition**, eg
  - A range of products for elite athletes
  - A range of products for rowers
4. **Multi-cultural**, eg
  - A range of products influenced by Italian recipes
  - A range of products influenced by Asian recipes
5. **Celebration**, eg
  - A range of products suitable for a child's birthday party
  - A range of products suitable for an engagement party

Centres can contextualise the task(s) to best suit their specific circumstances, which includes the availability of and access to resources.

## Task taking

All work, with the exception of research, must be done under informal supervision. Research may be completed under limited supervision.

### Initial research

Students can undertake research to locate sources outside of the classroom without supervision. They can locate as many sources to take into the write up phase as they wish.

### Design and make tasks

The student must complete the following under classroom supervision:

- write up of their portfolio
- making of their product

However, Students are allowed to use the following to help them with completing their task:

- their initial research they have undertaken outside of the classroom to produce focused selective research for their portfolio
- sources the centre provides.

A student can bring in additional research notes at any time provided the write up of their research is done under the same supervised conditions.

## Task marking

Marking of the tasks will be carried out by teachers and moderated by Edexcel.



## Assessment criteria

For these tasks teachers must mark students' work using the assessment criteria specified below. Teachers should check carefully that students' work is their own and is not copied from source material without any attempt by students to put the material into their own words.

### Design activity (50 marks)

Investigate (15 marks)		
Sub-sections	Descriptor	Mark range
a) Analysing the brief	Level of response not worthy of credit.	0
	Analysis is superficial leading to unclear design needs.	1
	Analysis is limited with some design needs clarified.	2
	Analysis is detailed with most design needs clarified.	3
b) Research	Level of response not worthy of credit.	0
	Research is superficial and does not focus on the design needs identified in the analysis. Analysis of existing products is insufficient to aid the writing of specification criteria.	1-2
	Research is general, focusing on some of the design needs identified in the analysis. Product analysis is used to inform the writing of some specification criteria.	3-4
	Research is selective and focuses on the design needs identified in the analysis. The performance, ingredients, components, processes, quality and sustainability issues of relevant existing products are explored in sufficient detail to aid the writing of specification criteria.	5-6
c) Specification	Level of response not worthy of credit.	0
	Specification points are superficial and not justified.	1-2
	Some specification points are realistic and measurable. Some specification points are developed from research but are not justified.	3-4
	Most specification points are realistic, technical, measurable and address some issues of sustainability. Specification fully justifies points developed from research.	5-6

<b>Design (20 marks)</b>		
<b>Sub-sections</b>	<b>Descriptor</b>	<b>Mark range</b>
d) Initial ideas	Level of response not worthy of credit.	0
	Alternative design ideas are similar and simplistic. Ideas are superficial and limited research is used. Limited specification points are addressed.	1–4
	Alternative design ideas are realistic and workable. Ideas are detailed and use relevant research. Ideas address most specification points.	5–8
	Alternative design ideas are realistic, workable and detailed. Ideas demonstrate detailed understanding of ingredients, processes and techniques and are supported by research information. Ideas address all key specification points.	9–12
e) Review	Level of response not worthy of credit.	0
	General and subjective comments against some specification points. Limited use of user group feedback.	1–2
	Objective evaluative comments against most specification points, that consider user group feedback and issues of sustainability.	3–4
f) Communication	Level of response not worthy of credit.	0
	Use of a range of communication techniques, including ICT where appropriate, with sufficient skill to convey an understanding of design ideas.	1–2
	Use of a range of communication techniques and media, including ICT and CAD where appropriate, with precision and accuracy.	3–4

<b>Develop (15 marks)</b>		
<b>Sub-sections</b>	<b>Descriptor</b>	<b>Mark range</b>
g) Development	Level of response not worthy of credit.	0
	Developments from alternative design ideas are minor and cosmetic. Simple modelling is used to test an aspect of the final design proposal against a design criterion.	1–3
	Developments are appropriate and use details from alternative design ideas to change, refine and improve the final design proposal. Modelling using ingredients is used to test some aspects of the final design proposal against relevant design criteria.	4–6
	Development is used to produce a final design proposal that is significantly different and improved compared to any previous alternative design ideas. Modelling to scale using ingredients or 2D and/or 3D computer simulations is used to test important aspects of the final design proposal against relevant design criteria. User group feedback is used in final modifications.	7–9
h) Final design	Level of response not worthy of credit.	0
	Final design proposal includes limited consideration of ingredients and/or component parts, processes and techniques.	1–2
	Final design proposal includes details of some ingredients and/or component parts, processes and techniques.	3–4
	Final design proposal includes technical details of all ingredients and/or component parts, processes and techniques.	5–6

### Make activity (range of products) (50 marks)

<b>Plan (6 marks)</b>		
<b>Sub-sections</b>	<b>Descriptor</b>	<b>Mark range</b>
a) Production plan	Level of response not worthy of credit.	0
	Superficial production plan that outlines some stages of manufacture with limited reference to quality control.	1–2
	Limited production plan that considers the main stages of manufacture with some reference to appropriate forms of quality control.	3–4
	Detailed production plan that considers all stages of manufacture in the correct sequence including specific forms of quality control.	5–6

Make (38 marks)		
Sub-sections	Descriptor	Mark range
b) Quality of manufacture	Level of response not worthy of credit.	0
	Equipment and processes, including CAD/CAM where appropriate, are selected with guidance. Limited understanding of the working properties of ingredients when selecting to manufacture a product. The task is undemanding. A limited range of skills and processes is used that show little attention to detail in their use.	1–8
	Equipment and processes, including CAD/CAM where appropriate, are selected with some guidance. Some understanding of the working properties of ingredients when selecting to manufacture a product. The task offers some challenge. A range of skills and processes is used demonstrating attention to detail in their use.	9–16
	Equipment and processes, including CAD/CAM where appropriate, are selected for specific uses independently. An appropriate understanding of the working properties of ingredients when selecting to manufacture a product. The task is challenging. A wide range of skills and processes is used with precision and accuracy.	17–24
c) Quality of outcome	Level of response not worthy of credit.	0
	Product includes the manufacture of some good quality elements that remain either unassembled or poorly assembled and finished. Completed product functions poorly.	1–4
	Product includes the manufacture of good quality elements that are generally well assembled and finished. Completed product functions adequately.	5–8
	Product includes the manufacture of high-quality elements, accurately assembled and well finished. Completed product is fully functional.	9–12
d) Health and safety	Level of response not worthy of credit.	0
	Demonstrate an awareness of safe working practices for most specific skills and processes.	1
	Demonstrate a high level of safety awareness throughout all aspects of manufacture.	2

Test and evaluate (6 marks)		
Sub-sections	Descriptor	Mark range
e) Testing and evaluation*	Level of response not worthy of credit.	0
	One or more simple tests carried out to check the performance and/or quality of the final product. Evaluative comments are subjective and reference a few specification points superficially. Use of basic language and the response lacks clarity and organisation. Spelling, punctuation and the rules of grammar used with limited accuracy.	1–2
	A range of tests carried out to check the performance and/or quality of the final product. Evaluative comments are objective and reference most specification points. Use of some design and technology terms and some focus and organisation. Spelling, punctuation and the rules of grammar used with some accuracy. Some spelling errors may still be found.	3–4
	A range of tests carried out to check the performance and/or quality of the final product with justification. Objective evaluative comments, including user group evaluation, consider most relevant, measurable specification points in detail, including sustainability issues. Use of a range of appropriate design and technology terms and shows good focus and organisation. Spelling, punctuation and the rules of grammar used with considerable accuracy.	5–6

\* Opportunity for students to be assessed on quality of written communication: strand (iii) — organise information clearly and coherently, using specialist vocabulary when appropriate.



Write your name here

Surname

Other names

Centre Number

Candidate Number

**Edexcel GCSE**

**Design and Technology: Food Technology**  
**Unit 2: Knowledge and Understanding of**  
**Food Technology**

Sample Assessment Material

**Time: 1 hour 30 minutes**

Paper Reference

**5FT02/01**

**You do not need any other materials.**

Total Marks

### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** the questions.
- Answer the questions in the spaces provided  
– *there may be more space than you need.*

### Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets  
– *use this as a guide as to how much time to spend on each question.*
- Questions labelled with an **asterisk** (\*) are ones where the quality of your written communication will be assessed.  
– *you should take particular care with your spelling, punctuation and grammar, as well as the clarity of expression, on these questions.*

### Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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3/4



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**Answer ALL the questions.**

**For each question 1 to 10, choose an answer A, B, C or D. Put a cross in the box indicating the answer you have chosen . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .**

**1** Freezing extends the shelf life of raw food materials using:

- A** a reduction in temperature
- B** chemical additives
- C** specialist packaging
- D** an increase in temperature

**(Total for Question 1 = 1 mark)**

---

**2** Milk is a good source of:

- A** iron
- B** calcium
- C** sodium
- D** fluoride

**(Total for Question 2 = 1 mark)**

---

**3** Baking is a dry method of cooking.

Another dry method of cooking is:

- A** poaching
- B** braising
- C** stewing
- D** barbecuing

**(Total for Question 3 = 1 mark)**

---



4 A person who will **not** eat any meat, but will eat eggs and dairy produce is known as:

- A a lacto-ovo vegetarian
- B a lacto-vegetarian
- C a vegan
- D an ovo-vegetarian

**(Total for Question 4 = 1 mark)**

---

5 Using a raising agent in a cake recipe will result in:

- A emulsification
- B aeration
- C fermentation
- D browning

**(Total for Question 5 = 1 mark)**

---

6 Which piece of electrical equipment uses computer aided manufacture (CAM)?

- A Breadmaker
- B Blender
- C Kettle
- D Mixer

**(Total for Question 6 = 1 mark)**

---

7 Which heat process involves heating milk to 132°C for one to three seconds?

- A Pasteurisation
- B Sterilisation
- C UHT
- D Canning

**(Total for Question 7 = 1 mark)**

---

**8** When an anti-oxidant is added to a food it will:

- A** increase shelf life
- B** improve stability
- C** improve taste
- D** increase nutritional value

**(Total for Question 8 = 1 mark)**

---

**9** Hazard analysis and critical control point (HACCP) is a:

- A** food processing system
- B** food safety system
- C** quality check system
- D** quality assurance system

**(Total for Question 9 = 1 mark)**

---

**10** A descriptor is used on food labelling to inform the consumer about:

- A** the amount of ingredients used in the product
- B** what the product is, if the name does not make this clear
- C** the nutritional value of the product, especially fat and sugar
- D** the name and contact details of the manufacturer

**(Total for Question 10 = 1 mark)**

---





**(Total = 10 marks)**

---

11 (a) The table below shows some tools and equipment.

Complete the table below by giving the missing names and uses:

(4)

Tools/Equipment	Name	Use
	Rolling pin	
	Scales	
		To scrape mixture from bottom of mixing bowl
		To drain vegetables

(b) Sugar is one of the basic ingredients used when making sweet baked goods.

(i) Name **one** type of sugar that can be used in cake production.

(1)

(ii) Give the functional use of sugar in the diet.

(1)

(iii) Give **two** reasons for using sugar in a cake recipe.

(2)

1 .....

2 .....

(c) Explain **one** reason why cakes are manufactured in batches.

(2)

.....

.....

.....

.....

(d) Explain **one** problem caused by having too much sugar in the diet.

(2)

.....

.....

.....

.....

(e) Outline why the following **three** additives are used in commercial cake mixes.

(3)

colour .....

.....

emulsifier .....

.....

anti-caking agent .....

.....

(f) The following recipe was used to produce a prototype cake:

100 g self raising flour

100 g butter

100 g caster sugar

2 eggs

30 ml warm water

Describe **two** modifications that would make the cake suitable for a vegan diet. (4)

1 .....

.....

.....

.....

2 .....

.....

.....

.....

**(Total for Question 11 = 19 marks)**

**12** Women need to eat carefully when they are pregnant.

A manufacturer is developing a new range of main course dishes that are suitable for pregnant women.

The specification for the main course dish is that it must:

- be savoury
- include one protein food
- include one carbohydrate food
- include the mineral iron
- be a single portion
- be filling
- have a range of textures
- be suitable to be reheated.

In the boxes opposite, use sketches and, where appropriate, brief notes to show **two different** design ideas for the main course dish that meet the specification points above.

Candidates are reminded that if a pencil is used for diagrams/sketches it must be dark (HB or B).

Coloured pens, pencils and highlighter pens must **not** be used.

Write your answers in the boxes provided opposite.

**Design idea 1**

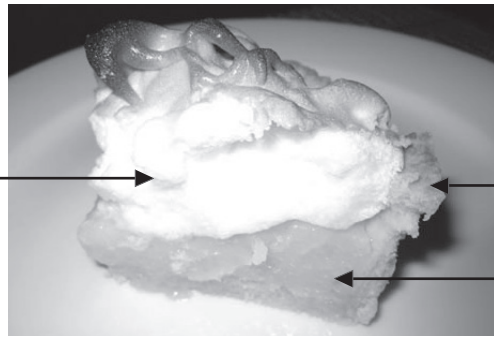
(8)

**Design idea 2**

(8)

**(Total for Question 12 = 16 marks)**

13 The image below shows a portion of lemon meringue pie that is sold pre-packed in supermarkets.



Meringue topping

Shortcrust pastry case

Lemon filling

(a) The pastry case is made using shortcrust pastry.

Give **two** properties of shortcrust pastry that makes it suitable for the case.

For each property, justify your answer.

(4)

Property 1 .....

Justification .....

Property 2 .....

Justification .....



(b) The lemon filling is put into the pastry case using a computer aided manufacture (CAM) machine.

Give **two** benefits of using a CAM machine to put the filling into the pastry case. (2)

1 .....

2 .....

(c) Explain why the lemon meringue is successful at meeting the following specification points:

(i) Can be eaten hot or cold. (2)

.....  
.....  
.....

(ii) Provide a range of textures. (2)

.....  
.....  
.....

\*(d) A food manufacturer produces a range of desserts.

Below are two recipes for a lemon meringue pie.

<b>Recipe A (ingredients only)</b>	<b>Recipe B (ingredients only)</b>
<p><b><i>Pastry case</i></b></p> <p>150 g plain flour 75 g margarine 35 g caster sugar 30 ml cold water</p> <p><b><i>Lemon filling</i></b></p> <p>600 ml water 3 egg yolks 30 g caster sugar 15 g cornflour juice and zest of 1 lemon</p> <p><b><i>Meringue topping</i></b></p> <p>3 egg whites 60 g caster sugar</p>	<p><b><i>Pastry case</i></b></p> <p>300 g ready made sweet shortcrust pastry</p> <p><b><i>Lemon filling</i></b></p> <p>600 ml water 15 g pasteurised egg yolk 30 g powdered lemon filling mix</p> <p><b><i>Meringue topping</i></b></p> <p>30 g dried egg white 75 ml water</p>

Evaluate recipe A compared to recipe B for use by a food manufacturer.

(6)

A series of horizontal dotted lines for writing the answer.

**(Total for Question 13 = 16 marks)**

14 (a) (i) Give **three** reasons why food is packaged.

(3)

1 .....

.....

2 .....

.....

3 .....

.....

(ii) Explain how the 'use by date' on a label protects the consumer.

(2)

.....

.....

.....

.....

Eggs provide a good source of high biological value (HBV) protein.

(b) Give **one** nutritional reason why protein is important in the human diet.

(1)

.....

(c) State **one** other nutrient apart from protein found in eggs.

(1)

.....

(d) Explain **one** reason why dried eggs are used in food production.

(2)

.....

.....

.....

.....

(e) A food manufacturer produces a range of dried egg products.

Describe **one** function of each of the following additives in an egg dessert mix.

(i) Gelatine

(2)

.....

.....

.....

.....

(ii) Modified starch

(2)

.....

.....

.....

.....

\*(f) Consumers are becoming more environmentally aware.

Discuss the ways in which food manufacturers could alter packaging to reduce its environmental impact.

(6)

Dotted lines for writing the answer.

---

**(Total for Question 14 = 19 marks)**

---

**TOTAL FOR PAPER = 80 MARKS**

## Sample mark scheme

Question Number	Answer	Mark
1.	A	(1)

Question Number	Answer	Mark
2.	B	(1)

Question Number	Answer	Mark
3.	D	(1)

Question Number	Answer	Mark
4.	A	(1)

Question Number	Answer	Mark
5.	B	(1)

Question Number	Answer	Mark
6.	A	(1)

Question Number	Answer	Mark
7.	C	(1)

Question Number	Answer	Mark
8.	A	(1)

Question Number	Answer	Mark
9.	B	(1)

Question Number	Answer	Mark
10.	B	(1)

Question Number	Answer	Mark
11. (a)	Rolling pin	Rolling dough/scones/pastry/icing/crushing biscuits/nuts (1)
	Scales	Weighing or measuring (1)
	Spatula (1)	To scrape mixture from bottom of mixing bowl
	Colander (1)	To drain vegetables
		1x1 1x1 1x1 1x1

Question Number	Answer	Mark
11. (b) (i)	<p>One sugar given from:</p> <ul style="list-style-type: none"> <li>• caster (1)</li> <li>• Demerara (1)</li> <li>• soft light (1)</li> <li>• dark brown (1)</li> <li>• crystals/nibs (1)</li> <li>• icing (1)</li> </ul>	1x1 (1)

Question Number	Answer	Mark
11. (b) (ii)	<ul style="list-style-type: none"> <li>• Provides energy (1)</li> </ul> <p><i>Only answer</i></p>	1x1 (1)



Question Number	Answer	Mark
11. (b) (iii)	<p>Two reasons given from:</p> <ul style="list-style-type: none"> <li>• tastes sweeter/sweetness (1)</li> <li>• contributes to brown colour/browning (1)</li> <li>• provides a light, airy texture/aeration (1)</li> <li>• reduces staling/retains moisture (1)</li> <li>• tender/soft texture (1)</li> <li>• crystallisation/caramelisation (1)</li> <li>• provides a dialectic quality when cooking in a microwave (1)</li> </ul> <p style="text-align: right;">1x1 1x1</p>	(2)

Question Number	Answer	Mark
11. (c)	<p>One reason explained from:</p> <ul style="list-style-type: none"> <li>• can produce a variety of flavours/styles (1) so limited quantities needed (1)</li> <li>• cheaper to batch produce (1) as ingredients can be bulk bought (1)</li> <li>• ensures consistent quality (1) when making different batches (1)</li> <li>• reasonable shelf life/stores well (1) so can make a large amount (1)</li> <li>• high demand/turnover (1) as product is popular (1)</li> </ul> <p style="text-align: right;">2x1</p>	(2)

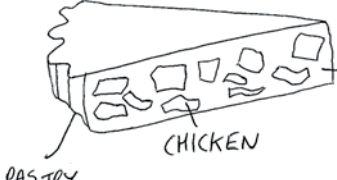
Question Number	Answer	Mark
11. (d)	<p>One problem explained from:</p> <ul style="list-style-type: none"> <li>• acid production attacks the enamel in tooth (1) causing a hole/dental caries/tooth decay (1)</li> <li>• excess sugar stored as adipose tissue/fat (1) resulting in weight gain/obesity (1)</li> <li>• obesity (1) can lead to diet related diseases/CHD/type II diabetes (1)</li> </ul> <p style="text-align: right;">2x1</p>	(2)

Question Number	Answer	Mark
11. (e)	<p>Three reasons outlined:</p> <ul style="list-style-type: none"> <li>• colour to improve the final colour/so it is appealing (1)</li> <li>• emulsifier to prevent separation of mixture once liquid is added (1)</li> </ul> <p style="text-align: right;">1x1 1x1 1x1</p>	(3)

Question Number	Answer	Mark
11. (f)	<p>Two modifications described from:</p> <ul style="list-style-type: none"> <li>• change butter (1) to a plant based source (1), eg soya margarine</li> <li>• change eggs (1) to egg replacer (egg replacers: AllergyCare/EnerG/Orgran No Egg – powdered starches used as egg substitute)/bananas/soy yoghurt/silken tofu/flex seeds/starch based ingredients, eg soyflour/cornflour (1)</li> </ul> <p><i>If correct ingredient/s named but no modification given award a maximum of one mark only. Do not accept the word soy twice.</i></p> <p style="text-align: right;">2x1 2x1</p>	(4)

Question Number	Answer	Mark
12.	<p><b>Design idea 1</b></p> <p>1 mark should be awarded for evidence of each point of the specification resolved in the design.</p> <p>When an answer does not viably answer a specification point 0 marks.</p> <p>For each specification point with the element viably satisfied 1 mark.</p> <p>Candidates may answer any specification point in either graphical form or by annotation.</p> <p><b>No marks are awarded for the quality of communication.</b></p> <ul style="list-style-type: none"> <li>• <b>be savoury (1):</b> demonstrates an understanding of a dish which is suitable for a main course not a pudding/cake/biscuit/based product</li> <li>• <b>include one protein food (1):</b>  meat – chicken/lamb/beef/pork  fish – white/oily fish  cheese (no soft or veined cheese)  eggs  milk/cream  nuts/pulse  lentils  TVP  Quorn</li> <li>• <b>include one carbohydrate food (1):</b>  rice  pasta/noodles  potatoes  bread  flour/pastry  oats</li> <li>• <b>include the mineral iron (1):</b>  spinach  beans  nuts  watercress  kale  corned beef</li> </ul> <p><b>Do not accept offal as this should not be eaten during pregnancy</b></p>	

Question Number	Answer	Mark
	<ul style="list-style-type: none"> <li>• be a single portion (1): indication of portion size weight of product not too much because of pregnancy sketched against a hand size</li> <li>• be filling (1): quantities of ingredients a named starch vegetable/noodles/sauce higher fat content</li> <li>• have a range of textures (1): crisp vegetables, eg onions, carrots soft vegetables, eg mushrooms pastry sauces</li> <li>• be suitable to be reheated (1): a sauce a cover, eg pastry/crumble/cheese</li> </ul> <div data-bbox="403 974 1129 1624" style="border: 1px solid black; padding: 10px; margin-top: 20px;"> <p style="text-align: center;">LASAGNE</p> <p style="text-align: right;">CHEESE SAUCE</p> <p style="text-align: left;">WHOLEMEAL PASTA</p> <p style="text-align: right;">MINCE MIXTURE CONTAINS ONIONS/MUSHROOMS AND TOMATOES</p> <p style="text-align: center;">SIZE - TO SERVE ONE 225g</p> <p style="text-align: center;">PROVIDES A FILLING FOOD AND IS CARBOHYDRATE</p> <p style="text-align: center;">CAN BE REHEATED IN A MICROWAVE OR MAINS CONVENTIONAL OVEN</p> <p style="text-align: center;">ACCOMPANIED WITH</p> <p style="text-align: right;">GREEN SALAD WITH WATERCRESS, ROCKET AND SPINACH</p> </div>	<p>8x1</p> <p>(8)</p>

Question Number	Answer	Mark
	<p><b>Design idea 2</b></p> <p>To score a mark for design idea 2, each specification point must be resolved in second design idea but the second design idea <b>must be technically/conceptually different in design and construction</b> from the first and not a simple variation on a theme to score the mark.</p> <p>Use exactly the same criteria as design idea 1 to mark design idea 2.</p> <div data-bbox="403 685 1129 1267" style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> <p style="text-align: center;">CHICKEN AND HAM PIE</p>  </div> <p style="text-align: right; margin-right: 20px;">8x1</p>	(8)

Question Number	Answer	Mark
13. (a)	<p>Two properties and linked justifications given from:</p> <ul style="list-style-type: none"> <li>• <b>Property:</b> strong (1)</li> <li>• <b>Justification:</b> pastry sets/holds its shape when filled with other ingredients (1)</li>   <li>• <b>Property:</b> easy to shape/cut (1)</li> <li>• <b>Justification:</b> pastry pliable and easy to handle (1)</li>   <li>• <b>Property:</b> structure of pastry is firm (1)</li> <li>• <b>Justification:</b> does not crumble (1)</li> </ul> <p style="text-align: right; margin-right: 20px;">2x1 2x1</p>	(4)

Question Number	Answer	Mark
13. (b)	<p>Two benefits given from:</p> <ul style="list-style-type: none"> <li>• the correct amount is dispensed (1)</li> <li>• the filling is put in the correct place (1)</li> <li>• more hygienic (1)</li> <li>• simultaneous process/faster (1)</li> </ul> <p style="text-align: right;">1x1 1x1</p>	(2)

Question Number	Answer	Mark
13. (c) (i)	<p>One explanation from:</p> <ul style="list-style-type: none"> <li>• the pie is edible hot or cold as it is already cooked (1) so no risk of food poisoning (1)</li> <li>• the pie can be reheated and it will retain its shape/structure (1) as the protein is already set/coagulated (1)</li> <li>• flavours will remain unaffected(1) by reheating (1)</li> </ul> <p style="text-align: right;">2x1</p>	(2)

Question Number	Answer	Mark
13. (c) (ii)	<p>One explanation from:</p> <ul style="list-style-type: none"> <li>• the meringue is soft/aerated inside (1) but with a crisp outer edge (1)</li> <li>• the lemon filling has a smooth/thick texture (1) while the shortcrust pastry is crisp (1)</li> </ul> <p style="text-align: right;">2x1</p>	(2)

Question Number	Answer	Mark
13. (d) QWC (iii)	<p>Evaluation to address the following issues:</p> <ul style="list-style-type: none"> <li>• Recipe A uses standard components/ready made ingredients whilst B does not which saves time/labour/ensures consistent quality</li> <li>• For Recipe A powdered/pasteurised ingredients are heat treated whilst for recipe B ..... therefore no bacterial growth/no safety issues/no wastage</li> <li>• Recipe A has standard components that contain additives whilst recipe B does not, this assists with the quality of the product</li> <li>• Storage easier for recipe A than Recipe B as pastry can be frozen/dry ingredients in containers/extended shelf life/no wastage</li> <li>• Recipe A has reduced costs than recipe B as cost per unit cheaper than buying fresh/less wastage</li> <li>• Recipe A is easier to produce than Recipe B as automated process uses less equipment</li> </ul> <p><i>Do not accept wastage more than once.</i></p> <p>If there are any further answers or any answers where B is better than A please insert them here.</p>	(6)
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-2	Candidate identifies the area(s) of comparison with no development OR identifies and develops one area. Shows limited understanding of the comparison. Writing communicates ideas using everyday language but the response lacks clarity and organisation. The student spells, punctuates and uses the rules of grammar with limited accuracy.
Level 2	3-4	Candidate identifies some areas of comparison with associated developments showing some understanding of the comparison. Writing communicates ideas using D&T terms accurately and showing some direction and control in the organising of material. The student uses some of the rules of grammar appropriately and spells and punctuates with some accuracy, although some spelling errors may still be found.
Level 3	5-6	Candidate identifies a range of areas of comparison with associated developments showing a detailed understanding of the comparison. Writing communicates ideas effectively, using a range of appropriately selected D&T terms and organising information clearly and coherently. The student spells, punctuates and uses the rules of grammar with considerable accuracy.

Question Number	Answer	Mark
14. (a) (i)	<p>Three reasons given from:</p> <ul style="list-style-type: none"> <li>• prevents physical damage, eg bashing, squashing, foods mixing (1)</li> <li>• prevents contamination (bacterial/chemical/physical) (1)</li> <li>• allows items to be stacked and transported (1)</li> <li>• preservation, prevents moisture loss/drying out/keeps fresh/maintains appearance (1)</li> <li>• advertising/promotion/illustration/information (1)</li> </ul> <p style="text-align: right;">1x1 1x1 1x1</p>	(3)

Question Number	Answer	Mark
14. (a) (ii)	<p>One explanation from:</p> <ul style="list-style-type: none"> <li>• the last date (1) at which it is safe to eat/before it makes you ill/causes food poisoning (1)</li> </ul> <p style="text-align: right;">2x1</p>	(2)

Question Number	Answer	Mark
14. (b)	<p>One reason given from:</p> <ul style="list-style-type: none"> <li>• growth/repair of body cells (1)</li> <li>• secondary source of energy (1)</li> </ul> <p style="text-align: right;">1x1</p>	(1)

Question Number	Answer	Mark
14. (c)	<p>One nutrient apart from protein given from:</p> <ul style="list-style-type: none"> <li>• minerals: calcium/iron/sodium (1)</li> <li>• vitamins: B2/niacin/A/D/E/K (1)</li> <li>• fat (1)</li> </ul> <p style="text-align: right;">1x1</p>	(1)

Question Number	Answer	Mark
14. (d)	<p>One reason explained from:</p> <ul style="list-style-type: none"> <li>• safer as eggs are heat treated/dehydrated (1) which destroys salmonella (1)</li> <li>• longer shelf life (1) as there is no moisture available for bacterial growth (1)</li> </ul> <p style="text-align: right;">2x1</p>	(2)



Question Number	Answer	Mark
14. (e) (i)	<p>One function described from:</p> <ul style="list-style-type: none"> <li>• stabiliser prevents separation of solids (1) holds suspension once liquid has been added (1)</li> <li>• setting agent (1) allows product to set/gel once cooled by trapping liquid (1)</li> </ul> <p style="text-align: right;">2x1</p>	(2)

Question Number	Answer	Mark
14. (e) (ii)	<p>One function described from:</p> <ul style="list-style-type: none"> <li>• prevents separation/leaking/weeping (1) of liquid from dessert (1)</li> <li>• allows for instant/quick thickening (1) without the need to cook (1)</li> </ul> <p style="text-align: right;">2x1</p>	(2)

Question Number	Answer	Mark
14. (f) QWC (iii)	<p>Indicative content</p> <p>Discussion to address the following issues:</p> <ul style="list-style-type: none"> <li>• reduces the layers/size of the packaging reduces the amount of packaging thrown out</li> <li>• biodegradable will break down quicker/reduces amount of waste in landfill</li> <li>• recyclable re-used/better for environment</li> <li>• reduction in printed colours less potentially harmful chemicals being used</li> <li>• reduction in packaging waste greener environment/customers purchasing less packaging</li> <li>• disposal of chemical waste less pollution in rivers/less harmful to animals</li> <li>• sustainable sources being greener/friendlier to the environment</li> <li>• reduces energy consumption reducing carbon footprint/saving planet</li> </ul>	(6)
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	Candidate identifies the way(s) with no development OR identifies and develops one way. Shows limited understanding of the ways. The student uses basic language and the response lacks clarity and organisation. Spelling, punctuation and the rules of grammar used with limited accuracy.
Level 2	3-4	Candidate identifies some ways with associated developments showing some understanding of the ways. The student uses some design and technology terms and shows some focus and organisation. Spelling, punctuation and the rules of grammar used with some accuracy. Some spelling errors may still be found.
Level 3	5-6	Candidate identifies a range of ways with associated developments showing a detailed understanding of the ways. The student uses a range of appropriate design and technology terms and shows good focus and organisation. Spelling, punctuation and the rules of grammar used with considerable accuracy.