

Candidate A – Health and Food Technology – No Errors

Home Economics Intermediate 2

Technological Project Pro forma

Notes for candidates

- 1 Instructions for completing the pro forma are contained in the Notes of Guidance for Candidates.
- 2 Do not add pages to the pro forma.
- 3 The pro forma should be completed in the set font (Times New Roman 11 point).
- 4 Do not use the “TAB” key, use “Ctrl TAB” to tabulate text.
- 5 Candidate details should be entered on the flyleaf which will be issued to your centre by SQA.
- 6 Page 14 has been set up to allow digital photographs to be imported.
- 7 Do not type outwith the boxes.

Technological Project Brief

Candidate A

Develop a dish for a tourist attraction café which includes Scottish produce.

Step 1.1 Analyse a complex situation, issue or problem – 5 marks available	
<ul style="list-style-type: none"> Identify the key points from the project brief Explain the relevance of the key points to the situation, issue or problem given in the project brief. 	
Key points (number each point) (2 marks)	Explanation (3 marks)
1 develop	<ul style="list-style-type: none"> I have to create a new food product for the café
2 dish	<ul style="list-style-type: none"> I must come up with a meal or snack item which is suitable to sell in a café My product may be sweet or savoury, hot or cold depending on what the café requires
3 tourist attraction	<ul style="list-style-type: none"> The café is to be at a place which is visited by people on holiday so I will need to consider including the kinds of foods tourists will like
4 café	<ul style="list-style-type: none"> As this is where my dish will be made and sold, I must consider the facilities and the skills of the staff
5 includes	<ul style="list-style-type: none"> My product must contain produce which originates in Scotland
6 Scottish produce	<ul style="list-style-type: none"> At least one of the ingredients in my dish must be grown or originate in Scotland
<i>The candidate has correctly identified all the key points.</i>	<i>The candidate has explained the relevance of each of the key points to the situation</i>
<i>2 marks</i>	<i>2 marks</i>
	<i>The candidate has given an additional point of explanation at Key Point 2</i>
	<i>1 mark</i>

Total marks for Step 1.1

5 marks

Step 1.2 Draw up appropriate criteria for a specification – 4 marks available	
Specification point (number each point) (2 marks)	How it can be measured (2 marks)
My dish must:	
1 have at least one ingredient which originates in Scotland	1 Interview Home Economics teacher
2 be different from other dishes on the café menu	2 Interview manager of a tourist attraction café
3 be able to be made by the café staff	3 Interview manager of a tourist attraction café
4 be liked by tourists	4 Sensory testing with tourists
5 be a satisfactory standard for sale	5 Sensory testing with tourists
<i>The candidate has identified five valid specification points which allows for a range of solutions (minimum of four valid specification points required)</i> <i>1 mark</i>	<i>All of the specification points have been written in measurable terms.</i> <i>2 marks</i>
<i>All specification points contain more detail than the brief.</i> <i>1 mark</i>	

Total marks for Step 1.2 4 marks

Step 1.3 Devise an overall plan for investigations – 4 marks available	
Investigation required (number each investigation) (2 marks)	Technique to be used (2 marks)
Find out:	
1 what foods are grown or produced in Scotland	• internet search
2 the likes and dislikes of tourists	• questionnaire to tourists
3 how much tourists are prepared to pay for a dish	• questionnaire to tourists
4 what is available at present on the menu of a tourist attraction café	• interview café manager
5 the facilities which are available to the café staff	• interview café manager
6 the skills of the café staff	• interview café manager
<i>The candidate has no obvious omissions therefore the entire mark allocation is available. The candidate has six relevant investigations (minimum of four valid investigations are required)</i>	<i>The candidate has correctly identified all techniques used</i>
<i>2 marks</i>	<i>2 marks</i>

Total marks for Step 1.3

4 marks

Total marks for Step 1

13 marks

Step 1.3 Devise an overall plan for investigations (continued)

Given the time available, choose from the proposed list of investigations three that you think are the most important in relation to the needs of the project brief.

Investigation number	Investigation to be carried out
1	Internet research
2	Questionnaire to tourists
3	Interview tourist attraction café manager

Now carry out each of the investigations listed above

Step 2.1 Implement the overall plan for investigations

For each investigation carried out:

- record the results
- draw conclusions from the results

Step 1.2 Investigations – 12 marks available						
Investigation 1 (4 marks)						
Aim	Internet research.					
Results	Websites used: www.visitscotland.com www.geo.ed.ac.uk www.rampantscotland.com					
Meat	Fish	Fruit	Vegetables	Dairy	Cereals	Other
beef pork lamb venison pheasant grouse	salmon herring trout oysters prawns scallops mussels	apples strawberries raspberries blackcurrants redcurrants tayberries brambles	potatoes carrots turnip cabbage kale	cheeses butter cream	wheat oats barley	honey whisky
<p>Conclusion</p> <ul style="list-style-type: none"> • I must use at least one of these foods in my dish so that it contains Scottish produce as required by the brief. • I will now find out which of these ingredients are likely to be most popular with tourists so that my dish is more likely to sell in the tourist attraction café. 						

<i>The candidate has carried out the aim as stated on Page 6</i>	<i>1 mark</i>
<i>The results are brief, concise and easy to interpret</i>	<i>1 mark</i>
<i>The results are based on fact and relevant to the brief</i>	<i>1 mark</i>
<i>The candidate has given a valid conclusion which shows progression</i>	<i>1 mark</i>

Step 1.2 Investigations (continued)

Investigation 2 (4 marks)

Aim Questionnaire to tourists.

Results

I gave questionnaires to 20 teachers in my school who visit tourist attraction cafés.

Q1 Please tick your favourite food from each group.

Meat	Fish	Fruit	Vegetables	Dairy	Cereals	Other
beef 12	salmon 8	apples 3	potatoes 19	cheeses 9	wheat 17	honey 7
pork 3	herring 0	strawberries 7	carrots 1	butter 0	oats 3	whisky 13
lamb 4	trout 1	raspberries 10	turnip 0	cream 11	barley 1	
venison 1	oysters 1	blackcurrants 0	cabbage 0			
pheasant 0	prawns 8	redcurrants 0	kale 0			
grouse 0	scallops 2	tayberries 0				
	mussels 0	brambles 0				

Q2 In a tourist attraction café, which of the following would you be most likely to buy?

Meal – 6

Snack – **14**

Q3 Would you prefer a hot or cold dish?

Hot – 8

Cold – **12**

Q4 Would you prefer a sweet or savoury dish?

Sweet – **16**

Savoury – 4

Q5 How much would you be prepared to pay for:

a main course dish

£2 - £3 - 4

£3 - £5 - **13**

£5 - £8 - 3

a snack

50p - £1 - 2

£1 - £2 - **14**

£2 - £3 - 4

Conclusion

- Most tourists would prefer a cold, sweet snack should cost between £1 and £2.
- I should try to include raspberries, cream, wheat and whisky as these are the tourists' most preferred foods could be included in a sweet product.
- I will now interview a manageress of a tourist attraction café to find out which kind of dish would be best to make for the café

The candidate has carried out the aim as stated on Page 6

1 mark

The results are brief, concise and east to interpret

1 mark

The results are based on fact and relevant to the brief

1 mark

The candidate has given a valid conclusion which shows progression

1 mark

Step 1.2 Investigations (continued)

Investigation 3 (4 marks)

Aim Interview tourist attraction café manager.

Results Interview with Jean McDonald, manageress of the café at Tay Castle

Q1 What type of sweet dishes do you sell?

A We have a range of desserts which include trifle, apple pie and chocolate gateau. We have a small range of homemade cakes including scones, chocolate gateau and carrot cake. We also sell homemade shortbread which is very popular.

Q2 What type of sweet dishes are most popular?

A Chocolate gateau is the most popular dessert and although it is a pudding, people often have it with a cup of tea or coffee. Our scones with raspberry jam are also popular and the shortbread always sells well.

Q3 Which are the most popular Scottish dishes?

A Soups such as Scotch broth and main courses which include Scottish beef. Customers also like to buy home baking and foods which use the traditional Scottish soft fruits such as raspberries and strawberries.

Q4 What do you charge for the sweet dishes on your menu?

A Our desserts range from £2.00 to £3.00. Our baked products are priced between £1.20 and £2.00.

Q5 What equipment does the café have for making the food?

A We have a good range of equipment, probably the type of equipment you would have in your Home Economics class, though some of it is larger than you would have at home.

Q6 How skilled are your staff?

My staff are all very good and can prepare a very wide range of dishes.

Conclusion

- As my product should be sweet because I found this was the most popular type of dish in Investigation 2, and the manageress said customers like to buy home baking, I shall make a cake. The manageress said that customers like to buy home baking which uses the traditional Scottish soft fruits, so I will include raspberries as I found these were the most popular Scottish fruit in Investigation 2.

The candidate has carried out the aim as stated on Page 6 1 mark

The results are brief, concise and easy to interpret 1 mark

The results are based on fact and relevant to the brief 1 mark

The candidate has given a valid conclusion which shows progression 1 mark

Total marks for Step 2.1

12 marks

Step 2.2 Derive a solution from the investigations – 3 marks available	
Chosen solution (2 marks)	
Raspberry sponge cake.	
Describe the chosen solution in detail (1 mark)	
<p><u>Sponge</u> 150g SR flour 100g caster sugar 100g Scottish butter 2 eggs 100g Scottish raspberries 5mls Jif lemon juice 2.5ml lemon rind 5mls concentrated orange juice 2.5mls orange rind</p> <p><u>Decoration</u> 150mls Scottish double cream 100g Scottish raspberries</p> <p><u>Method</u> 1. Set oven to 180°C or Gas Mark 4. 2. Grease and line 20cm x 25cm baking tin. 3. Sieve the flour. Beat the eggs. 4. Cream the butter and caster sugar. 5. Add the eggs and flour alternately to the creamed mixture. Beat well. 6. Grate the orange and lemon rind finely. 7. Add the orange and lemon rind and the orange and lemon juice. 8. Fold in the raspberries. 9. Put into the baking tin and bake for 20 minutes. 10. Cool. 11. Whip cream. 12. When the sponge is completely cold, decorate with the whipped cream and raspberries.</p>	
<i>The candidate has generated one solution which is based on the results of investigations and is appropriate to the brief.</i>	<i>2 marks</i>
<i>The candidate has given a description of the solution which can be visualised.</i>	<i>1 mark</i>

Total for Step 2.2 3 marks

Total for Step 2 15 marks

Step 3.1 Manufacture the chosen solution – 12 marks available	
Time allocation (3 marks)	Step-by-step sequence of work (3 marks)
<u>Thursday, 10th January, 2008.</u>	
11.00 – 11.05	Set oven. Collect equipment. Grease and line tin.
11.05 – 11.15	Grate orange and lemon rind. Weigh and measure ingredients.
11.20 – 11.30	Sieve the flour. Beat the eggs. Cream the butter and sugar. Add the eggs and flour. Add the lemon rind, orange rind, lemon juice and orange juice. Fold in the raspberries. Place in baking tin and put into the oven.
11.30 – 11.40	Wash up.
11.40 – 11.50	Whisk cream. Place cream into a small bowl. Cover with cling film and refrigerate. Wash up.
11.50 – 12.00	Remove cake from oven. Remove lining paper. Place on a cooling tray and leave to cool.
<u>Thursday, 10th January, 2008.</u>	
1.00 – 1.15	Personal preparation. Put cake into an airtight container. Wash up.
<u>Friday, 11th January, 2008.</u>	
11.00 – 11.05	Collect equipment. Collect ingredients.
11.05 – 11.15	Cut the cake into squares. Pipe a swirl of cream onto each square. Decorate with raspberries. Serve.
11.15 – 11.25	Wash up

*The candidate has produced a highly effective timeplan
The candidate has produced a highly effective sequence of work.*

*3 marks
3 marks*

Step 3.1 Manufacture the chosen solution (continued)	
Identify and requisition all the resources and equipment required to manufacture the solution	
Resources required (3 marks)	Equipment required (3 marks)
150g SR flour 100g caster sugar 100g Scottish butter 2 eggs 200g Scottish raspberries 5mls Jif lemon juice 2.5ml lemon rind 5mls concentrated orange juice 2.5mls orange rind 150mls Scottish double cream 5mls oil for greasing greaseproof paper	scales 2.5ml measuring spoon 5ml measuring spoon measuring jug mixing bowl 2 small bowls cup plate grater vegetable knife chopping board lemon squeezer wooden spoon tablespoon round bladed knife fork pastry brush baking tin 20cms x 25cms cooling tray electric whisk piping bag star nozzle plastic box with lid white serving plate paper napkin
<i>The candidate has identified all main resources required</i>	<i>The candidate has identified all main equipment required</i>
<i>3 marks</i>	<i>3 marks</i>

Total for Step 3.1

12 marks

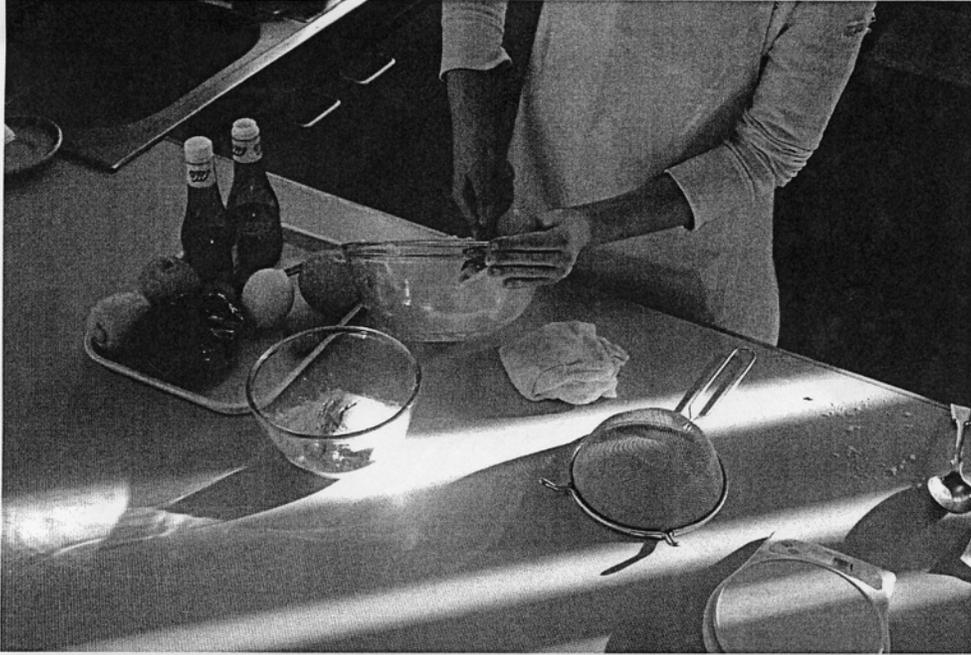
Now manufacture your chosen solution

This page is for the candidate's own use

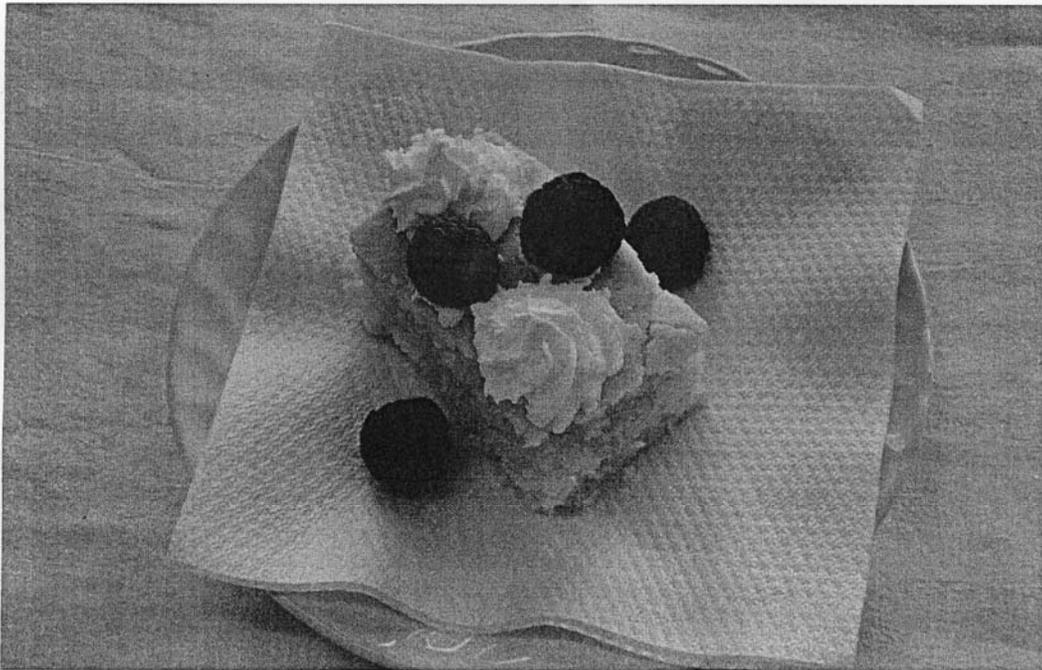
It may be used to make notes during manufacture or record any modifications made to the plan

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Authenticated photographic evidence of manufacture



Evidence of the solution **during** manufacture



Evidence of the solution **after** manufacture

Step 3.2 Devise one test for the manufactured solution – 1 mark available	
Test to be carried out	Technique to be used
Sensory testing with tourists to find their opinion of my product.	Sensory testing with additional questions with tourists

The candidate has presented one test and has identified an appropriate technique.

1 mark

Total for Step 3.2

1 mark

Now carry out the test

Step 3.3 Implement the test for the manufactured solution
<p>For the test carried out:</p> <ul style="list-style-type: none"> • record the results • draw conclusions from the results

Step 3.3 Implement the test for the manufactured solution (continued) – 3 marks available

Test

Results I asked 5 teachers who are also tourists to try my product and the results are shown below.

Key: 1 = very poor
 2 = fair
 3 = acceptable
 4 = good
 5 = excellent

	Tester1	Tester2	Tester3	Tester4	Tester5
Appearance	5	5	5	5	5
Texture	5	5	5	4	5
Taste	5	5	5	4	5

Q1 Would you buy this dish in a tourist attraction café?

A Yes (5)
 No (0)

Q2 Would you make any changes to the dish?

A No (4)
 Add more raspberries and cream
 to make it more moist. (1)

Q3 How much would you be willing to pay for the dish?

A £1.20 - £1.60 (2)
 £1.60 - £2.00 (3)

Conclusion

- Four of my testers gave full marks in all categories and one gave a minimum of 'good' in all categories so this proved that they liked my product.
- All of my testers said they would buy my product in a tourist attraction café so it is likely to sell well.
- I should consider adding more raspberries and cream as one tester suggested this to improve the texture and taste of my product.

The results are brief, concise and easy to interpret 1 mark

The results are based on fact and relevant to the brief 1 mark

The candidate has given a valid conclusion which shows progression 1 mark

Total for Step 3.3 3 marks

Total for Step 3 16 marks

Step 4.1 Evaluate the chosen solution – 6 marks available	
Evaluate the solution against the specification points (3 marks) Use the results either from investigations, manufacture and/or testing where appropriate.	
Specification point	Evaluation
My dish must:	
1 have at least one ingredient which originates in Scotland	My product included three ingredients which I found in Investigation 1 originate in Scotland, as I used Scottish butter, Scottish raspberries and Scottish cream.
2 be different from other dishes on the café menu	My product is different from other dishes on the café menu because this was not one of the sweet dishes the café manageress listed when I interviewed her in Investigation 2.
3 be able to be made by the café staff	The café staff would be able to make my product as they are skilled and have a wide range of equipment available to them.
4 be liked by tourists	The tourists liked my product as they gave it high scores in every category when I carried out my testing.
5 be a satisfactory standard for sale	My product was a satisfactory standard for sale as all my testers said they would buy it in a tourist attraction café.

The candidate has evaluated all of the specification points based on the results of testing or investigations.

3 marks

Total for Step 4.1

3 marks

Step 4.1 (continued) Evaluate the overall plan

Evaluate Steps 1-3 using the following criteria:

- time
- resources
- skills and abilities

Evaluation of use of time

I used teachers from my school who were also tourists for testing my product. This was a good use of my time as I did not have to go to a tourist attraction café to find testers.

Evaluation of use of resources

The manageress of Tay Castle café was a good resource as her knowledge helped me to make a successful product.

Evaluation of skills and abilities

I had the skills and abilities to produce a product which was a good standard as my testers gave it high scores in all categories of the sensory evaluation and all said they would buy it if it were on sale in a tourist attraction café.

The candidate has evaluated the plan using each of the criteria based on evidence which can be found within the candidate's Technological Project.

3 marks

Total for Step 4.2

3 marks

Total for Step 4

6 marks

TOTAL FOR TECHNOLOGICAL PROJECT

50 MARKS