

FOR OFFICIAL USE

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Total Marks

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X118/11/01

NATIONAL
QUALIFICATIONS
2015

THURSDAY, 7 MAY
1.00 PM – 2.30 PM

HOME ECONOMICS
HEALTH AND FOOD
TECHNOLOGY
INTERMEDIATE 2

Fill in these boxes and read what is printed below.

Full name of centre

--

Town

--

Forename(s)

--

Surname

--

Date of birth

Day Month Year

--	--	--	--	--	--

Scottish candidate number

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Number of seat

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- 1 Try to answer every question in this paper.
- 2 Read the whole of each question carefully before you answer it.
Remember that some questions have an element of choice in them.
The breakdown of Knowledge and Understanding (**KU**), Drawing Conclusions (**DC**) and Evaluation (**EV**) marks are indicated beside each question.
- 3 Write your answers in the spaces provided.
- 4 Additional lines at the end of the booklet can be used if more space is required for answers or if you need to do any rough work.
- 5 Before leaving the examination room you must give this book to the Invigilator. If you do not, you may lose all the marks for this paper.



Marks

1. (a) State **one** function of protein.

Function _____ 1 KU

(b) Name **two** food sources of each of the following types of protein.

High biological value protein

Food source 1 _____ 1 KU

Food source 2 _____ 1 KU

Low biological value protein

Food source 1 _____ 1 KU

Food source 2 _____ 1 KU

(c) Explain the inter-relationship between calcium and vitamin D.

Explanation _____

_____ 1 KU

(d) State **two** ways of preventing dental caries.

Point 1 _____

_____ 1 KU

Point 2 _____

_____ 1 KU

1. (continued)

Marks

(e) An active 16 year old boy has the following day's meals.

Taking account of the Dietary Reference Values (DRVs) for teenage boys aged 15–18 years, evaluate the suitability of his day's meals.

Dietary Reference Values for Teenage Boys aged 15–18 years					
<i>Estimated Average Requirements</i>	<i>Reference Nutrient Intake</i>				
<i>Energy (MJ)</i>	<i>NSP (g)</i>	<i>Vitamin B1 (mg)</i>	<i>Vitamin C (mg)</i>	<i>Iron (mg)</i>	<i>Sodium (mg)</i>
11.51	18	1.1	40	11.3	1600

Nutrient content of a day's meals eaten by a 16 year old boy					
<i>Energy (MJ)</i>	<i>NSP (g)</i>	<i>Vitamin B1 (mg)</i>	<i>Vitamin C (mg)</i>	<i>Iron (mg)</i>	<i>Sodium (mg)</i>
9.36	14.5	0.8	32	13.9	1900

Evaluation 1 _____

1 EV

Evaluation 2 _____

1 EV

Evaluation 3 _____

1 EV

Evaluation 4 _____

1 EV

Marks

2. (a) A manufacturer wants to develop a fruit drink to be sold in sports venues.

The drink must:

- be healthy
- be sold from a vending machine.

Study the information about fruit drinks below and choose the most suitable for the manufacturer to make.

Information about fruit drinks			
	Fruit drink A	Fruit drink B	Fruit drink C
Main Ingredients	<ul style="list-style-type: none"> • 50% fruit juice • water • sweeteners 	<ul style="list-style-type: none"> • water • 10% fruit juice • sugar 	<ul style="list-style-type: none"> • 55% fruit juice • water • sugar
Aesthetic appeal	****	***	****
Cost	£££	£	££
Container	Foil pouch with straw	Plastic bottle with resealable cap	Plastic bottle with sports cap
Variety of flavours	****	**	****
Carbonated	No	Yes	No

Key:			
*	→	****	£ → ££££
Poor		Excellent	Inexpensive Expensive

Tick (✓) **one** of the boxes below to indicate your choice.

Fruit drink A Fruit drink B Fruit drink C

1 DC

Marks

2. (a) (continued)

Give **three** reasons for your choice.

Reason 1 _____

1 DC

Reason 2 _____

1 DC

Reason 3 _____

1 DC

(b) Identify **two** sensory tests the manufacturer could carry out on the fruit drink.

Explain the information the manufacturer would gain from Sensory test 1.

Sensory test 1 _____

1 KU

Information _____

1 KU

Sensory test 2 _____

1 KU

[Turn over

Marks

2. (continued)

(c) Identify **two** points of information that, by **law**, must be stated on a food label.

Explain the importance of **each** point to the consumer.

Point 1 _____ **1 KU**

Explanation _____

_____ **1 KU**

Point 2 _____ **1 KU**

Explanation _____

_____ **1 KU**

(d) Name **one** Act which protects the consumer when buying food.



Act _____ **1 KU**

[Turn over for Question 3 on *Page eight*

Marks

3. (a) A student who stays in a flat with a shared kitchen wants to buy a toaster.

Choose **one** of the toasters below and evaluate its suitability.

Toaster A	Toaster B
 <ul style="list-style-type: none"> • Two slice toaster • Cool touch exterior • Available in black or white • 5 browning settings • Buzzer to indicate when toast is ready • Defrost button 	 <ul style="list-style-type: none"> • Four slice toaster • Rubber feet • Available in black or stainless steel • 9 browning settings • High lift facility * • Wide slots for thick bread and rolls

* handle to help remove toast after cooking.

Tick (✓) **one** of the boxes below to indicate your choice.

Toaster A

Toaster B

Evaluation 1 _____

_____ **1 EV**

Evaluation 2 _____

_____ **1 EV**

Evaluation 3 _____

_____ **1 EV**

Evaluation 4 _____

_____ **1 EV**

Marks

3. (continued)

(b) State **two** ways the student could get advice when choosing a toaster.

1 _____

1 KU

2 _____

1 KU

(c) Explain **two** ways **one** of the following might affect a consumer's choice of food.

Budget Knowledge of Nutrition

Tick (✓) **one** of the boxes to indicate your choice.

Explanation 1 _____

1 KU

Explanation 2 _____

1 KU

[Turn over

3. (continued)

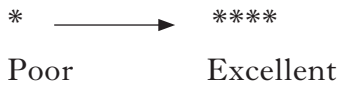
Marks

(d) The student wants to buy a ready made meal to eat while studying.

Study the information about ready made meals below and choose the most suitable for the student.

Information about ready made meals			
	Ready made meal A	Ready made meal B	Ready made meal C
Colour	**	***	****
Portion size	**	****	***
Ease of preparation	***	***	**
Value for money	***	****	****
Texture	**	***	***

Key:



Tick (✓) **one** of the boxes below to indicate your choice.

Ready made meal A Ready made meal B Ready made meal C **1 DC**

Reason 1 _____

1 DC

Reason 2 _____

1 DC

Reason 3 _____

1 DC

[Turn over for Question 4 on *Page twelve*

Marks

4. (a) A nursery is celebrating its 10th anniversary and the staff want to buy a personalised celebration cake for the occasion.

The cake must:

- appeal to children
- be able to be personalised.

Study the information about celebration cakes below and choose the **most suitable** cake for the nursery staff to buy.

Information about celebration cakes			
	Cake A	Cake B	Cake C
Type of cake	Sponge	Sponge	Fruit
Range of sizes available	**	***	*
Aesthetic appeal	***	****	**
Shelf life	**	***	****
Personalisation	Can be personalised at additional cost	Free personalisation 24 hours notice required	Personalisation kit included
Cost	££	££	£££

Key:

* →	****	£ →	££££
Poor	Excellent	Inexpensive	Expensive

Tick (✓) **one** of the boxes below to indicate your choice.

Cake A Cake B Cake C

1 DC

Marks

4. (a) (continued)

Give **three** reasons for your choice.

Reason 1 _____

1 DC

Reason 2 _____

1 DC

Reason 3 _____

1 DC

(b) Explain why a food manufacturer would consider the following when developing a food product.

Cost of ingredients _____

1 KU

Flavour _____

1 KU

(c) State the correct temperature range required for a refrigerator.

1 KU

[Turn over

Marks

4. (continued)

(d) Explain why a food manufacturer may carry out **two** of the following stages in product development.

Place the numbers **1 and 2** in the boxes to indicate your choice.

Concept generation

Prototype production

Marketing plan

Explanation 1 _____

1 KU

Explanation 2 _____

1 KU

(e) Give **one** example of one of the following changes which occur during food production.

Tick (✓) **one** of the boxes to indicate your choice.

Reversible change

Irreversible change

Example _____

1 KU

Marks

4. (continued)

(f) Explain how changing the proportion of ingredients in **two** of the following products would affect the finished result.

Place the numbers **1 and 2** in the boxes to indicate your choice.

Decrease the proportion of flour in a sauce.

Increase the proportion of sugar in a sponge.

Decrease the proportion of fat in pastry.

Explanation 1 _____

1 KU

Explanation 2 _____

1 KU

[Turn over

Marks

5. (a) A manufacturer wishes to change the recipe below to help meet the Scottish Dietary Targets.

<p>Macaroni</p> <p>Plain flour</p> <p>Butter</p> <p>Whole milk</p> <p>Cheddar cheese</p> <p>Salt</p>
--

Identify **three different** Scottish Dietary Targets.

For **each** dietary target identified, describe **one** change that could be made to help meet the targets.

Scottish Dietary Target 1 _____

1 KU

Change _____

1 KU

Scottish Dietary Target 2 _____

1 KU

Change _____

1 KU

Scottish Dietary Target 3 _____

1 KU

Change _____

1 KU

Marks

5. (continued)

- (b) A caterer is going to make soup and wants to buy a liquidiser to blend the soup.

Study the information about liquidisers below and choose the **most suitable** liquidiser for the caterer to buy.

Information about liquidisers		
Liquidiser A	Liquidiser B	Liquidiser C
<ul style="list-style-type: none"> • Power 750W • 1.5 litre jug • Noise level – medium • 4 speed settings • Pulse function • Ice crushing action • Cost – £79.99 	<ul style="list-style-type: none"> • Power 500W • 0.8 litre jug • Noise level – low • 2 speed settings • 2 colours available • Hand wash only • Cost – £49.99 	<ul style="list-style-type: none"> • Power 750W • 1.6 litre jug • Noise level – low • Variable speed setting • Pulse action • Stainless steel blade • Cost – £74.99

Tick (✓) **one** of the boxes below to indicate your choice.

Liquidiser A Liquidiser B Liquidiser C

1 DC

Give **three** reasons for your choice.

Reason 1 _____

1 DC

Reason 2 _____

1 DC

Reason 3 _____

1 DC

Marks

5. (continued)

(c) State **one** advantage and **one** disadvantage of buying foods online.

Advantage _____

1 KU

Disadvantage _____

1 KU

[END OF QUESTION PAPER]

Marks

ADDITIONAL SPACE FOR ANSWERS

ACKNOWLEDGEMENTS

Question 3(a) – Mariusz Gwizdon/shutterstock.com
Sean D/shutterstock.com