$\square$

## X118/11/01

NATIONAL
QUALIFICATIONS 2012

THURSDAY, 3 MAY
$1.00 \mathrm{PM}-2.30 \mathrm{PM}$
HOME ECONOMICS HEALTH AND FOOD TECHNOLOGY INTERMEDIATE 2

Fill in these boxes and read what is printed below.

Full name of centre
$\square$
Forename(s)


Town
$\square$

Surname


Date of birth
Day Month


Number of seat
$\qquad$

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.

1. (a) For each of the following nutrients state:
(i) one function;
(ii) two different food sources.

## Carbohydrate

Function
Food Source 1
1 KU
Food Source 2

## Vitamin D

Function

Food Source 1 $\qquad$ 1 KU

Food Source 2 1 KU
(b) State two diet related diseases linked to a high intake of sugar.

Disease 1
1 KU
Disease 2
1 KU

1. (continued)
(c) Taking account of the Dietary Reference Values (DRVs) for a boy aged $1-3$ years, evaluate the suitability of the toddler's meals.

| Dietary Reference Values for a boy aged 1-3 years |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated <br> Average <br> Requirements | Reference Nutrient Intake |  |  |  |  |
| Energy <br> $(\mathrm{MJ})$ | Protein <br> $(\mathrm{mg})$ | Calcium <br> $(\mathrm{mg})$ | Vitamin B <br> Thiamine <br> $(\mathrm{mg})$ | Iron <br> $(\mathrm{mg})$ | Vitamin C <br> $(\mathrm{mg})$ |
| 5.20 | 14.5 | 350 | 0.5 | 6.9 | 30 |


| Dietary Analysis of a toddler's meals |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated <br> Average <br> Requirements | Reference Nutrient Intake |  |  |  |  |
| Energy <br> (MJ) | Protein <br> $(\mathrm{mg})$ | Calcium <br> $(\mathrm{mg})$ | Vitamin B <br> Thiamine <br> $(\mathrm{mg})$ | Iron <br> $(\mathrm{mg})$ | Vitamin C <br> $(\mathrm{mg})$ |
| 6.10 | 11.8 | 380 | 0.6 | 4.2 | 35 |

Evaluation 1 $\qquad$
$\qquad$
$\qquad$
Evaluation 2 $\qquad$
$\qquad$
$\qquad$
Evaluation 3 $\qquad$
$\qquad$
$\qquad$
Evaluation 4 $\qquad$
$\qquad$
$\qquad$
2. (a) A manufacturer wants to introduce a range of "Food-to-go" lunch boxes.
The food must:

- be international
- be ready to eat
- be aesthetically pleasing
- be value for money
- have recyclable packaging.

Study the information about the "Food-to-go" lunch boxes below and choose the most suitable to be sold.

| Information about "Food-to-go" lunch boxes |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Lunch box A | Lunch box B | Lunch box C |
| Packaging | - cardboard box with plastic inner sections <br> - wooden chopsticks <br> - soy sauce sachet | - waxed cardboard box with cardboard dividers <br> - wooden fork <br> - paper napkin | - polystyrene tray with cellophane wrap <br> - plastic cutlery <br> - moist wipe in foil sachet |
| Contents | - Chinese rice salad <br> - prawn crackers <br> - lychees | - Italian pasta salad <br> - mini bread sticks <br> - watermelon slices | - Scotch egg salad <br> - ready salted crisps <br> - apple |
| Appearance | **** | **** | *** |
| Flavour | ** | *** | *** |
| Cost | ££尢 | £尢 | £. |



Tick $(\checkmark)$ one of the boxes below to indicate your choice.
Lunch box A $\quad \square$ Lunch box B $\quad \square \quad$ Lunch box C $\square$
2. (a) (continued)

Give three reasons for your choice.
Reason 1 $\qquad$
$\qquad$
$\qquad$ 1 DC
Reason 2 $\qquad$
$\qquad$
$\qquad$ 1 DC
Reason 3 $\qquad$
$\qquad$
$\qquad$ 1 DC
(b) Identify two sensory tests the manufacturer could carry out on the "Food-to-go" lunch boxes.

Explain the information the manufacturer would gain from test 1 .
Sensory test 1 $\qquad$ 1 KU
Information $\qquad$
$\qquad$
$\qquad$ 1 KU
Sensory test 2 $\qquad$ 1 KU

## 2. (continued)

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

Explain the importance of each point to the consumer.
Point 1

Explanation $\qquad$
$\qquad$
$\qquad$ 1 KU
Point 2 $\qquad$ 1 KU

Explanation $\qquad$
$\qquad$
$\qquad$ 1 KU
(d) Name one Act which protects the consumer when buying food.

Act $\qquad$ 1 KU
[Turn over for Question 3 on Page eight
3. (a) The landlord of a student flat wants to buy a microwave for use in a small, shared kitchen.
Choose one of the microwaves below and evaluate its suitability.

## Microwave A

- H 25 cm, W 43 cm , D 33 cm
- power - 700 W
- available in black or white
- manual operation
- chaos defrost*
- auto weight cook facility


## Microwave B

- H 31 cm, W 46 cm , D 36 cm
- power -800 W
- stainless steel finish
- touch controls
- inverter technology**
- child safety lock
* chaos defrost - uses random pulses of microwave energy to reduce defrosting time.
** inverter technology - ensures food is heated evenly.
Tick $(\boldsymbol{\checkmark})$ one of the boxes below to indicate your choice.

Microwave A $\square$ Microwave B


Evaluation 1 $\qquad$
$\qquad$
$\qquad$
Evaluation 2 $\qquad$
$\qquad$
$\qquad$
Evaluation 3 $\qquad$
$\qquad$
$\qquad$

Evaluation 4 $\qquad$
$\qquad$
$\qquad$

## 3. (continued)

(b) State two ways the landlord could get advice when choosing a microwave.

1 $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ 1 KU
(c) Explain two ways one of the following might affect a consumer's choice of food.

Budget


Knowledge of nutrition $\square$

Tick $(\checkmark)$ one of the boxes to indicate your choice.
Explanation 1 $\qquad$
$\qquad$
$\qquad$
Explanation 2 $\qquad$
$\qquad$
$\qquad$ 1 KU

## 3. (continued)

(d) A student wants to buy a ready made meal.

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



Tick $(\boldsymbol{\checkmark})$ one of the boxes below to indicate your choice.
Ready made meal A $\square$ Ready made meal B $\square$ Ready made meal C $\square$ 1 DC

## 3. (d) (continued)

Give three reasons for your choice.
Reason 1 $\qquad$
$\qquad$
$\qquad$ 1 DC
Reason 2
$\qquad$
$\qquad$ 1 DC
Reason 3 $\qquad$
$\qquad$
$\qquad$ 1 DC
4. (a) A party planner has been asked to provide a cake for a child's birthday party.
The cake must:

- appeal to children
- be personalised
- be additive free.

Study the information about cakes below and choose the most suitable cake for the party planner to provide.

| Information about children's birthday cakes |  |  |  |
| :--- | :---: | :---: | :---: |
|  | Cake A | Cake B | Cake C |
| Type of cake | Fruit | Sponge | Sponge |
| Ranges of sizes <br> available | $\checkmark$ | $\checkmark \checkmark$ | $\checkmark \checkmark \checkmark$ |
| Aesthetic <br> appeal | $\checkmark \checkmark$ | $\checkmark \checkmark \checkmark$ | $\checkmark \checkmark \checkmark \checkmark$ |
| Additives used | No | Yes | No |
| Shelf life | $\checkmark \checkmark \checkmark \checkmark$ | $\checkmark \checkmark$ | $\checkmark \checkmark \checkmark$ |
| Can be <br> personalised | Personalisation <br> kit included | Can be <br> personalised at <br> additional cost | Free <br> personalisation <br> 24 hrs notice <br> required |
| Cost | £££ | £.£ | ££ |

Key:


Tick $(\boldsymbol{\checkmark})$ one of the boxes below to indicate your choice.

Cake A $\square$ Cake B $\square$ Cake C $\square$

## 4. (a) (continued)

Give three reasons for your choice.
Reason 1 $\qquad$
$\qquad$
$\qquad$ 1 DC
Reason 2 $\qquad$
$\qquad$
$\qquad$ 1 DC
Reason 3 $\qquad$
$\qquad$
$\qquad$ 1 DC
(b) Explain why a food manufacturer would consider the following when developing a food product.

Cost of ingredients $\qquad$
$\qquad$
$\qquad$
Flavour $\qquad$
$\qquad$
$\qquad$ 1 KU
(c) State the correct temperature range required for a refrigerator.
$\qquad$ 1 KU

## 4. (continued)

(d) Explain why a food manufacturer may carry out two of the following stages in product development.
Place the numbers $\mathbf{1}$ and 2 in the boxes to indicate your choice.

Concept Generation


Prototype Production


Marketing Plan


Explanation 1 $\qquad$
$\qquad$
$\qquad$

Explanation 2 $\qquad$
$\qquad$
$\qquad$
(e) Give one example of one of the following changes which occur during food production.

Tick $(\checkmark)$ one of the boxes to indicate your choice.

Reversible change


Irreversible change $\square$

Example $\qquad$
$\qquad$
$\qquad$

## 4. (continued)

(f) Explain how changing the proportion of ingredients in two of the following products would affect the finished result.
Place the numbers $\mathbf{1}$ and $\mathbf{2}$ in the boxes to indicate your choice.

Increase the proportion of flour in a sauce.


Increase the proportion of sugar in a sponge. $\square$

Increase the proportion of fat in pastry. $\square$

Explanation 1 $\qquad$
$\qquad$
$\qquad$
Explanation 2 $\qquad$
$\qquad$
$\qquad$
5. (a) State three Scottish dietary targets. Give a different practical way of meeting each target.

Scottish dietary target 1
1 KU
Practical way $\qquad$
$\qquad$
$\qquad$ 1 KU
Scottish dietary target 2
Practical way $\qquad$
$\qquad$
$\qquad$ 1 KU
Scottish dietary target 3
Practical way $\qquad$
$\qquad$
$\qquad$ 1 KU

## 5. (continued)

(b) A Home Economics department wants to buy hand blenders. The pupils often make soup and use breadcrumbs in their cooking. The kitchens have limited storage space.
Study the information about hand blenders below and choose the most suitable hand blenders for the department to buy.

| Information about hand blenders |  |  |
| :---: | :---: | :---: |
| Hand blender A | Hand blender B | Hand blender C |
| - Power - 300 W <br> - Stainless steel blades <br> - Anti-splash guard <br> - 3 speeds <br> - Purées, blends, chops <br> - Wall attachment <br> - Noise level - low <br> - Cost - £. 12.99 | - Power - 250W <br> - Stainless steel blades <br> - Turbo boost function <br> - 1 speed <br> - Purées <br> - Recipe leaflet included <br> - Noise level - medium <br> - Cost - £ $12 \cdot 50$ | - Power - 275 W <br> - Plastic blades <br> - Easy grip handle <br> - 3 speeds <br> - Purées, whisks, blends <br> - Beaker included <br> - Noise level - low <br> - Cost-£13.99 |

Tick $(\boldsymbol{\checkmark})$ one of the boxes below to indicate your choice.


Hand blender C $\square$

Give three reasons for your choice.
Reason 1 $\qquad$
$\qquad$
$\qquad$
Reason 2 $\qquad$
$\qquad$
$\qquad$

Reason 3 $\qquad$
$\qquad$
$\qquad$

## 5. (continued)

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

Advantage
$\qquad$
$\qquad$ 1 KU
Disadvantage $\qquad$
$\qquad$
$\qquad$ 1 KU
[END OF QUESTION PAPER]

[^0]$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

[^1]
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


[^0]:    ADDITIONAL SPACE FOR ANSWERS

[^1]:    ADDITIONAL SPACE FOR ANSWERS

