

X118/12/01

NATIONAL TUESDAY, 7 MAY
QUALIFICATIONS 1.00 PM – 3.00 PM
2013

HOME ECONOMICS
HEALTH AND FOOD
TECHNOLOGY
HIGHER

80 marks are allocated to this paper.

This paper consists of **two** sections.

Candidates should attempt the following:

Section A—All questions

Section B—Question 1 and any other **two** questions.

The breakdown of Knowledge and Understanding (**KU**) and Evaluation (**EV**) marks are indicated beside each question.



[BLANK PAGE]

SECTION A

Attempt ALL questions.

You should spend approximately 30 minutes on this part of the paper.

Marks

1. State **one** condition required for bacterial growth. 1
2. Identify **one** food source of vitamin C. 1
3. State **one** food to avoid during pregnancy. 1
4. Give **one** voluntary piece of information found on food labels. 1
5. Identify **one** factor which affects the energy requirements of an individual. 1
6. What does the abbreviation **NMES** stand for? 1
7. Identify **one** food product where fermentation is used. 1
8. State **one** area covered by the Consumer Protection from Unfair Trading Regulations 2008 (CPR's). 1
9. Give **two** functions of water in the diet. 2
10. Identify **two** benefits of functional foods. 2
11. State **two** factors other than diet which may contribute to coronary heart disease (CHD). 2
12. Give **two** points of advice to follow when weaning a baby. 2
13. State **two** reasons why manufacturers disassemble food products. 2
14. Give **one** advantage and **one** disadvantage of extrusion cooking. 2

(20)

[Turn over

SECTION B

Attempt **THREE** questions from this section: **Question 1** and any other **TWO** questions.

You should spend approximately 30 minutes on each question.

Marks

1. (a) The table opposite shows a day's nutrient and NSP content of meals eaten by an active female teenager.
- Using your knowledge of nutrition, and the information provided, evaluate the suitability of this day's nutritional intake. **6 EV**
- (b) Identify and explain **three** dietary factors which may contribute to obesity. **6 KU**
- (c) Evaluate the contribution of bread in the diet. **4 EV**
- (d) Explain the effects of heat on **each** of the following.
- (i) Fats
 - (ii) Sugars **4 KU**
- (20)**

1. (a) (continued)

<i>Nutrient and NSP (dietary fibre) content of a day's meals eaten by an active female teenager</i>							
<i>Energy</i>		<i>Protein</i> (g)	<i>Vitamin B2</i> (mg)	<i>Vitamin A</i> (µg)	<i>Iron</i> (mg)	<i>Calcium</i> (mg)	<i>NSP</i> (g)
(MJ)	(kcal)						
8.24	1970	55	1.3	610	13.9	700	23

<i>Reference Nutrient Intake for Selected Nutrients in the UK (per day) for females aged 15–18 years</i>				
<i>Protein</i> (g)	<i>Vitamin B2</i> (mg)	<i>Vitamin A</i> (µg)	<i>Iron</i> (mg)	<i>Calcium</i> (mg)
45.4	1.1	600	14.8	800

<i>Estimated Average Requirement for Energy in the UK (per day) for females aged 15–18 years</i>		
<i>Energy</i>		<i>NSP</i>
MJ	kcal	(g)
8.83	2110	18

[Turn over

Marks

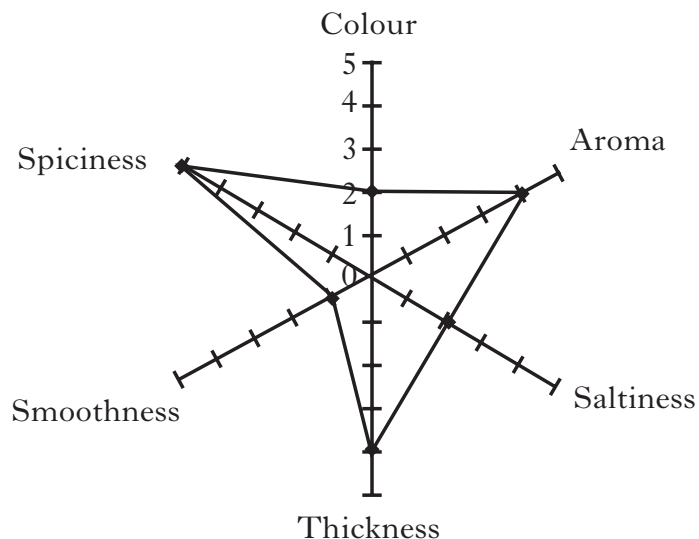
2. (a) Identify and explain **three** stages in the development of a new soup.

6 KU

(b) The star profile shows the results of testing the soup.

Evaluate the suitability of this soup for the elderly.

5 EV



(c) Explain the role of the Environmental Health Department (EHD) in ensuring food safety.

3 KU

(d) Evaluate **each** of the following technological developments for the consumer.

(i) Cook-chill

(ii) Ultra Heat Treated (UHT)

4 EV

(e) Explain **two** ways the consumer benefits from European food labelling directives.

2 KU

(20)

3. (a) Identify and explain **three** reasons for an increase in food poisoning. **6 KU**
- (b) Evaluate the nutritional suitability of the following meal for a vegetarian.
- Broccoli soup
 - Lentil curry
 - Lemon cheesecake
- 4 EV**
- (c) Explain how **each** of the following food additives benefits the consumer.
- (i) Colourings
 - (ii) Preservatives
- 4 KU**
- (d) Evaluate how **each** of the following factors may influence a consumer's choice of food.
- (i) Cooking skills
 - (ii) Foreign travel
 - (iii) Environmental issues
 - (iv) Money off coupons
- 4 EV**
- (e) Explain how **each** of the following affects gelatinisation in food products.
- (i) Starch
 - (ii) Acid
- 2 KU**
- (20)**

[Turn over for Question 4 on Page eight

- Marks*
4. (a) Evaluate how school meals contribute to meeting **five different** dietary targets. **5 EV**
- (b) Explain the benefits to the consumer of **each** of the following.
- (i) Myco-proteins
 - (ii) Modified atmosphere packaging (MAP) **4 KU**
- (c) Evaluate the use of sugar substitutes in food products. **3 EV**
- (d) Identify and explain **two** dietary factors to be considered for someone recovering from an illness. **4 KU**
- (e) Explain the responsibilities of **each** of the following.
- (i) Department for Environment, Food and Rural Affairs (DEFRA)
 - (ii) Food Standards Agency (FSA) **4 KU**
- (20)**

[END OF QUESTION PAPER]