

X118/12/01

NATIONAL
QUALIFICATIONS
2015

THURSDAY, 7 MAY
1.00 PM – 3.00 PM

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.



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SECTION A

Attempt ALL questions.

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

Marks

- | | |
|--|-------------|
| 1. Name one water soluble vitamin. | 1 |
| 2. Identify one source of saturated fat. | 1 |
| 3. Name one sensory test. | 1 |
| 4. Give one example of how vitamin B is lost during storage. | 1 |
| 5. Name one piece of statutory information on a food label. | 1 |
| 6. What does the abbreviation EU stand for? | 1 |
| 7. Name one source of protein suitable for a vegan. | 1 |
| 8. Explain the term extrinsic sugar. | 1 |
| 9. State two areas covered by the Sale and Supply of Goods Act 1994. | 2 |
| 10. Give two functions of fat in a baked product. | 2 |
| 11. Identify two dietary factors to consider for someone recovering from illness. | 2 |
| 12. Give two benefits of a school breakfast club. | 2 |
| 13. Give two responsibilities of The Food Standards Agency (FSA). | 2 |
| 14. State one advantage and one disadvantage of extruded foods. | 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 a pregnant woman.

Using your knowledge of nutrition, and the information provided, evaluate the suitability of this day's nutritional intake.

6 EV

- (b) Explain the effect of heat on the following.

(i) Protein

(ii) Carbohydrate

4 KU

- (c) Evaluate the contribution of pasta in the diet.

4 EV

- (d) Identify and explain **three** dietary factors which may prevent osteoporosis.

6 KU

(20)

1. (a) (continued)

<i>Nutrient and NSP content of a day's meals eaten by a pregnant woman</i>							
<i>Energy</i>		<i>Protein</i> (g)	<i>Folate</i> (µg)	<i>Vitamin A</i> (µg)	<i>Sodium</i> (mg)	<i>Iron</i> (mg)	<i>NSP</i> (g)
(MJ)	(kcal)						
7.35	1755	60	200	675	1800	15.6	22

<i>Reference Nutrient Intake for Selected Nutrients in the UK (per day) for pregnant women</i>				
<i>Protein</i> (g)	<i>Folate</i> (µg)	<i>Vitamin A</i> (µg)	<i>Sodium</i> (mg)	<i>Iron</i> (mg)
51.0	300	700	1600	14.8

<i>Estimated Average Requirement for Energy in the UK (per day) for pregnant women</i>		
MJ	kcal	<i>NSP</i> (g)
8.96	2140	18.0

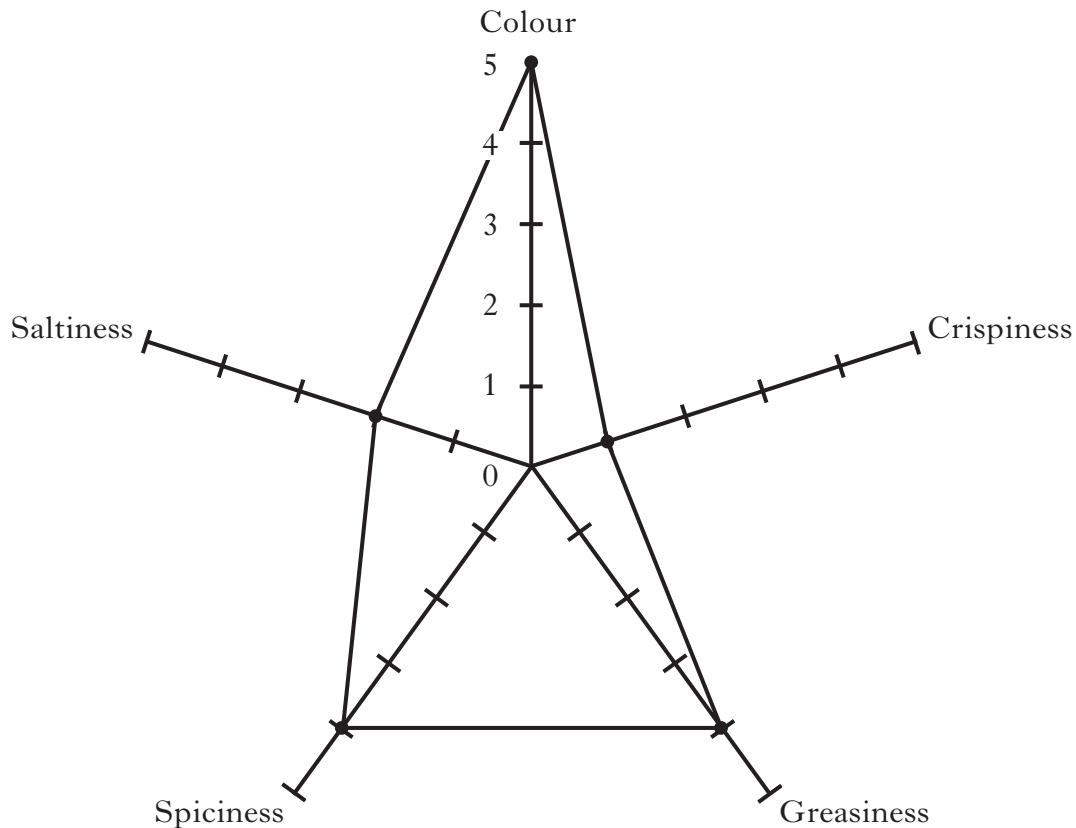
[Turn over

2. (a) Explain **each** of the following stages in the production of a new pizza. Marks

- (i) Concept generation
- (ii) Prototype production
- (iii) Product testing
- (iv) Launch

4 KU

(b) The star profile below shows the results of testing the pizza. Evaluate the suitability of this pizza for a teenager.



4 EV

(c) Explain **two** ways in which food manufacturers are encouraging consumers to meet **each** of the following dietary targets.

- (i) Increasing fruit intake
- (ii) Reducing salt intake

4 KU

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

- (i) Freezing
- (ii) Hydroponics

4 EV

(e) Explain the responsibilities of **each** of the following.

- (i) Environmental Health Department (EHD)
- (ii) Trading Standards Department (TSD)

4 KU

(20)

Marks

3. (a) Identify and explain **two** mechanical methods of introducing air into a baked product. **4 KU**
- (b) Evaluate the nutritional suitability of the following meal for the elderly.
- Chicken curry
 - Brown rice
 - Lemon sponge pudding
- 4 EV**
- (c) Evaluate **each** of the following influences on consumer choice of food.
- (i) Shift patterns
 - (ii) Peer pressure
 - (iii) TV advertising
 - (iv) Money off coupons
- 4 EV**
- (d) Explain how **each** of the following food additives benefits the consumer.
- (i) Emulsifiers
 - (ii) Colourings
- 4 KU**
- (e) Identify and explain **two** control measures to prevent contamination of food by *Bacillus cereus*. **4 KU**
- (20)**

[Turn over for Question 4 on *Page eight*

- Marks*
4. (a) Identify and explain **three** factors, **other than diet**, which may contribute to coronary heart disease. **6 KU**
- (b) Evaluate the usefulness to the consumer of the following food labelling information.
- (i) Nutritional information
- (ii) Environmental information **4 EV**
- (c) Identify and explain **three** reasons why food manufacturers carry out sensory testing of food products. **6 KU**
- (d) Evaluate **each** of the following to the consumer.
- (i) Sweeteners
- (ii) Fairtrade foods **4 EV**
- (20)**

[END OF QUESTION PAPER]