

# X118/12/01

---

NATIONAL THURSDAY, 7 MAY  
QUALIFICATIONS 1.00 PM – 3.00 PM  
2015

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]**  
**DO NOT WRITE ON THIS PAGE**

## SECTION A

**Attempt ALL questions.**

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

*Marks*

- |  |             |
|--|-------------|
| 1. Name <b>one</b> water soluble vitamin.  | 1           |
| 2. Identify <b>one</b> source of saturated fat.  | 1           |
| 3. Name <b>one</b> sensory test.   | 1           |
| 4. Give <b>one</b> example of how vitamin B is lost during storage.                      | 1           |
| 5. Name <b>one</b> piece of statutory information on a food label.                       | 1           |
| 6. What does the abbreviation <b>EU</b> stand for?                                       | 1           |
| 7. Name <b>one</b> source of protein suitable for a vegan.                               | 1           |
| 8. Explain the term extrinsic sugar.   | 1           |
| 9. State <b>two</b> areas covered by the Sale and Supply of Goods Act 1994.              | 2           |
| 10. Give <b>two</b> functions of fat in a baked product.                                 | 2           |
| 11. Identify <b>two</b> dietary factors to consider for someone recovering from illness. | 2           |
| 12. Give <b>two</b> benefits of a school breakfast club.                                 | 2           |
| 13. Give <b>two</b> responsibilities of The Food Standards Agency (FSA).                 | 2           |
| 14. State <b>one</b> advantage and <b>one</b> disadvantage of extruded foods.            | 2           |
|  | <b>(20)</b> |

**[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**

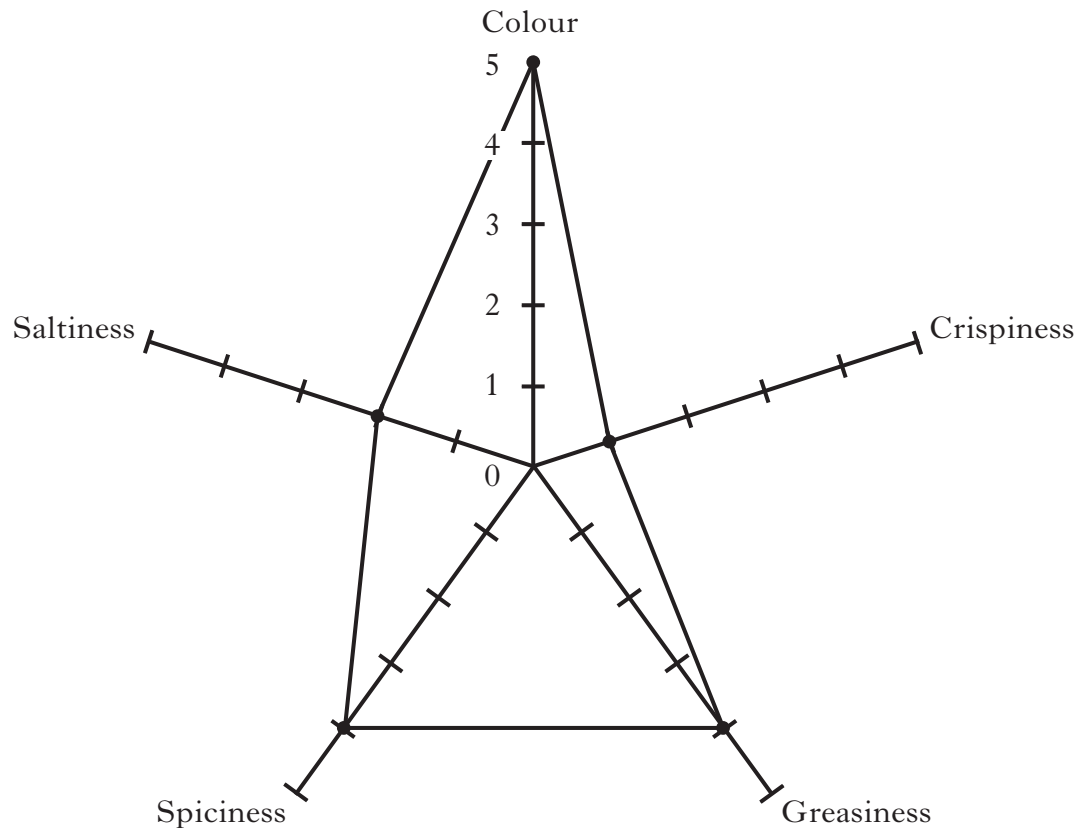
2. (a) Explain **each** of the following stages in the production of a new pizza.

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]