

Write your Examination Number here

--

M 48



**Coimisiún na Scrúduithe Stáit
State Examinations Commission**

Leaving Certificate Examination 2005

HOME ECONOMICS – SCIENTIFIC AND SOCIAL

HIGHER LEVEL

CENTRE STAMP

FRIDAY, 10 JUNE – AFTERNOON, 2.00 to 4.30

280/320 MARKS

Instructions to Candidates

- Section A** There are **twelve** questions in this section.
Candidates are required to answer any **ten** questions.
Each question carries **6** marks.
Write your answers in the spaces provided on the examination paper.
- Section B** There are **five** questions in this section.
Candidates are required to answer **Question 1 and any other two questions**.
Question 1 is worth **80** marks.
Questions **2, 3, 4 and 5** are worth **50** marks each.
Write your answers in the separate answer book provided.
- Section C** There are **three** questions in this section.
Candidates are required to answer **one** elective question to include **part (a)** and either **part (b) or part (c)**.
Candidates who submitted Textiles, Fashion and Design coursework for examination may only attempt Question 2 from this section.
Electives **1 and 3** are worth **80** marks each. Elective **2** is worth **40** marks.
Write your answers in the separate answer book provided.

You must return your examination paper with your answer book at the end of the examination.

Section A

Answer any **ten** questions from this section.
Each question is worth 6 marks.
Write your answers in the spaces provided.

1. Name **one** food source of **each** of the proteins listed below. (6)

Protein	Food Source
Albumin	
Caesinogen	
Collagen	
Actin	
Gluten	
Myosin	

2. (a) State **two** functions of lipids in the body. (2)

(i) _____

(ii) _____

- (b) Complete the following table in relation to the digestion of lipids. (4)

Digestive Gland	Secretion	Enzyme	Change
Pancreas			

3. (a) State **two** biological functions of water. (4)

(i) _____

(ii) _____

- (b) State **one** property of water. (2)

4. (a) State **two** effects of Ultra-Heat Treatment (UHT) on milk. (4)

(i) _____

(ii) _____

(b) What is a fortified food? (2)

5. (a) Give **one** reason why a food manufacturer might use sensory analysis testing. (2)

(b) Name **two** categories of sensory analysis tests. List **one** test from each category. (4)

Category	Test

6. (a) State **two** uses of micro-organisms in food production. (4)

(i) _____

(ii) _____

(b) Suggest **one** method of controlling enzymic spoilage in foods. (2)

7. (a) List **two** career opportunities in the food industry (2)

(i) _____

(ii) _____

(b) State **two** ways that the Food Safety Authority of Ireland (FSAI) supports the work of the food industry. (4)

(i) _____

(ii) _____

8. State **one** function of **each** of the food additives listed below. (6)

Food Additive	Function
Flavour Enhancer	_____

Emulsifier	_____

Antioxidant	_____

9. State the function of **each** of the following parts of a refrigerator: (6)

the thermostat _____

the refrigerant _____

10. In relation to the *management process* explain and give an example of **each** of the following: (6)

Input _____

Example _____

Output _____

Example _____

11. Name and explain the **two** compulsory deductions taken from a person's gross income. (6)

(i) _____

(ii) _____

12. Identify **three** recent trends in housing developments in Ireland. (6)

(i) _____

(ii) _____

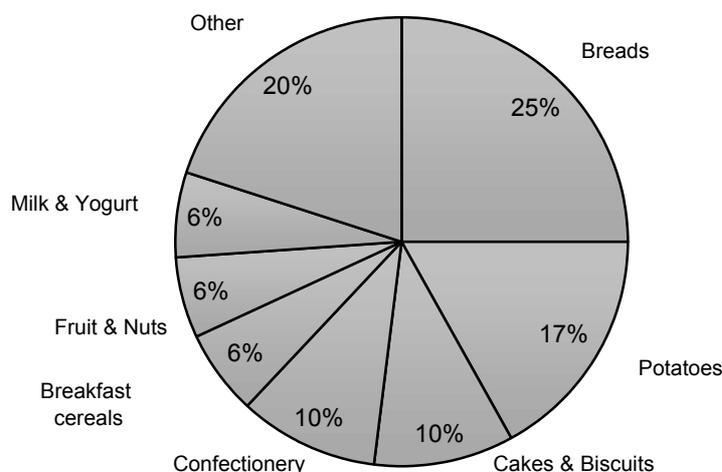
(iii) _____

Section B

Answer Question 1 and any other two questions from this section.
Question 1 is worth 80 marks. Questions 2, 3, 4 and 5 are worth 50 marks each.

1. A recent survey found the main sources of carbohydrate in the Irish diet are as illustrated below.

Main Sources of Carbohydrate in the Irish Diet



(North-South Food Consumption Survey, 2001)

- (a) Using the information provided in the chart, and having regard to current healthy eating guidelines, suggest **three** ways that the food sources of carbohydrates in the diet should be adjusted.
Give a reason for **each** suggestion. (18)
- (b) Describe the chemical structure of **each** of the following:
(i) monosaccharides
(ii) disaccharides
(iii) polysaccharides.
Give **one** example of each. (24)
- (c) Name and explain **three** properties of carbohydrates that are useful in food preparation. (18)
- (d) Evaluate the role of food labelling in assisting the consumer when selecting foods. (20)

2. *Preservation aims to ensure that the colour, flavour, texture and nutritive value of the preserved food is as near as possible to the fresh food.*

Nutritional Value of Fresh, Frozen and Canned Peas

Nutritional information per 100g	Energy (kcal)	Protein (g)	Carbohydrate (g)	Vitamin C (mg)	Vitamin A (µg)	Sodium (mg)	Iron (mg)	Thiamine (mg)
Fresh peas (raw)	67	5.8	10.6	25	300	1	1.9	32
Frozen peas (raw)	53	5.7	7.2	17	300	3	1.5	32
Canned peas	47	4.6	7	8	300	230	1.6	13

- (a) Using the information in the table, comment on:
- (i) the effects of freezing on the Vitamin C content of peas
 - (ii) the effects of canning on the Vitamin C, the Sodium and the Thiamine content of peas.
- Give **one** possible reason in each case. (24)
- (b) Profile a food of your choice that has been processed to extend the shelf life. Refer to:
- (i) stages of production
 - (ii) packaging
 - (iii) labelling. (26)

3. *The microwave cooker has become an integral part of the kitchen in recent years.*

- (a) Set out details of a study you have carried out on a microwave cooker. Refer to:
- (i) working principle
 - (ii) modern design features
 - (iii) guidelines for using the appliance. (30)
- (b) Evaluate the contribution of the microwave cooker to modern food preparation and cooking practices. (12)
- (c) Outline the protection provided to the consumer by the Hire Purchase Act 1960. (8)

4. *Studies show that impulse buying can account for 65% of purchases in supermarkets.*
(Consumer Choice May 2001)
- (a) Describe **four** in-store techniques that supermarkets use to encourage consumer spending. (20)
 - (b) Name **three** research methods used to gather information on the consumer. Explain how consumer research benefits (i) the retailer and (ii) the consumer. (19)
 - (c) Name and outline the role of any **one** voluntary agency concerned with consumer protection. (11)
5. *Parents / legal guardians have the primary responsibility for the upbringing and development of their children. The State assists parents / legal guardians in this responsibility.*
(Article 18, UN Convention on the Rights of Children)
- (a) Outline **four** rights of children within the family. (12)
 - (b) Discuss how the state assists the family in the rearing of children. (18)
 - (c) Analyse how (i) social factors and (ii) economic factors affect parenting roles within the family unit. (20)

Section C

Answer one elective question from this section.

Candidates who submitted Textiles, Fashion and Design coursework for examination may only attempt Question 2.

Elective 1 - Home Design and Management (80 marks)

Candidates selecting this elective must answer 1 (a) and either 1 (b) or 1 (c).

1. (a) *Colm and Ann Smyth have two children, Alan (16 months) and Aoife (3 yrs). They have recently moved into their new house. The back of the house is south-facing. To cut down on costs they have decided to carry out the interior design work themselves.*
- (i) Give an account of the factors that this couple should consider when planning the interior design of their home. (20)
- (ii) Design and sketch the layout of any one room in the house. In relation to the room describe each of the following:
(a) the colour scheme
(b) the lighting
(c) the flooring. (20)
- (iii) Explain how any two principles of design have been applied when designing the layout of the room. (10)

and

1. (b) *The number of private rented dwellings almost doubled between 1991-2002.*
(Census, 2002)
- (i) Give an account of the comparative costs of buying a place to live and renting accommodation. (15)
- (ii) Comment on the adequacy of housing provision in Ireland to meet the variation in housing needs. (15)

or

1. (c) (i) Name the two main types of plastic used in the home. In relation to each list (a) its uses and (b) its properties. (20)
- (ii) Explain the underlying principle involved in double glazing as a method of reducing heat loss through windows. (10)

Elective 2 - Textiles, Fashion and Design (40 marks)

Candidates selecting this elective must answer 2 (a) and either 2 (b) or 2 (c).

2. (a) *Clothing design aims to produce a garment that is aesthetically pleasing and fit for its purpose.*

(i) Sketch and describe a winter jacket suitable for a primary school student. (9)

(ii) In relation to the fabric for the jacket, give details of:

(a) type of fabric and reasons for choice

(b) one fabric performance test that could be carried out to determine the suitability of the fabric

(c) one functional finish that could be applied to the fabric. (16)

and

2. (b) *Knitted fabrics are a popular choice for Autumn and Winter fashion collections.*

(i) Explain how knitted fabric is constructed. (9)

(ii) List two desirable properties of knitted fabric. (6)

or

2. (c) (i) Assess the impact of industrial influences on the clothing industry in Ireland. (9)

(ii) Discuss one career opportunity in the clothing industry. (6)

Elective 3 - Social Studies (80 marks)

Candidates selecting this elective must answer 3 (a) and either 3 (b) or 3 (c).

3. (a) *Volunteering is the commitment of time and energy for the benefit of society and the local community. It can empower people to fulfil their potential while contributing to social and environmental change.*

(Volunteering Ireland 2004)

- (i) Differentiate between (a) voluntary work and (b) unpaid work. (10)
- (ii) With reference to the above statement, discuss:
(a) how voluntary work empowers a person to fulfil his/her potential
(b) how voluntary work contributes to social and environmental change in the local community. (24)
- (iii) Identify and explain the factors that affect attitudes to work. (16)

and

3. (b) *Employment is expected to grow by 23,0000 while unemployment will average 5%.*

(Budget 2004)

- (i) Name and give details of one state initiative that encourages foreign investment thus creating employment. (10)
- (ii) Discuss the impact of developing technology on work and employment. (20)

or

3. (c) **Education provision should accommodate students with different needs.**

- (i) Give an account of the supports provided in second-level schools for students with special education needs. (18)
- (ii) Outline the benefits of pre-school education. (12)

Blank Page