Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination, 2013
HOME ECONOMICS – SCIENTIFIC AND SOCIAL
HIGHER LEVEL

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 attempt only 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. Complete the table below in relation to the biological functions of protein. (6)

<table>
<thead>
<tr>
<th>Type</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural proteins</td>
<td></td>
</tr>
<tr>
<td>Physiologically active</td>
<td></td>
</tr>
<tr>
<td>proteins</td>
<td></td>
</tr>
<tr>
<td>Nutrient proteins</td>
<td></td>
</tr>
</tbody>
</table>

2. In relation to lipids, explain each of the following terms: (6)

   Oxidative rancidity___________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

   Hydrolytic rancidity________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

3. The conditions listed below are caused by a deficiency in the diet of specific vitamins.
Identify the vitamin in each case. (6)

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Vitamin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Night blindness</td>
<td></td>
</tr>
<tr>
<td>Rickets</td>
<td></td>
</tr>
<tr>
<td>Poor blood clotting</td>
<td></td>
</tr>
<tr>
<td>Anaemia</td>
<td></td>
</tr>
<tr>
<td>Beri-beri</td>
<td></td>
</tr>
<tr>
<td>Neural tube defects</td>
<td></td>
</tr>
</tbody>
</table>
4. Name three types of flour and suggest a different culinary use for each. (6)

<table>
<thead>
<tr>
<th>Type of flour</th>
<th>Culinary use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Differentiate between the following dairy spreads and give one example of each. (6)

Low-fat spreads ________________________________________________________________
__________________________________________________________________________
Example ________________________________________________________________
Functional dairy spreads ________________________________________________
__________________________________________________________________________
Example ________________________________________________________________

6. Complete the table below in relation to food contamination. (6)

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>How contamination occurs</th>
<th>Possible effect on the body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pesticides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal residues</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. In relation to freezing explain each of the following: (6)

Quick freezing ________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Slow freezing ________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
8. Differentiate between each of the following micro-organisms: (6)

*Aerobic micro-organisms*

________________________________________________________________________

*Anaerobic micro-organisms*

________________________________________________________________________

*Facultative micro-organisms*

________________________________________________________________________

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

*Compressor*

________________________________________________________________________

*Condenser*

________________________________________________________________________

*Evaporator*

________________________________________________________________________

10. Outline the role of each of the consumer organisations named below. (6)

*Consumer Association of Ireland (CAI)*

________________________________________________________________________

*Advertising Standards Authority of Ireland (ASAI)*

________________________________________________________________________
11. Explain the purpose of any two of the following fabric detergent components: (6)

Surfactants

Enzymes

Fluorescents

12. In relation to household budgeting, explain essential expenditure and discretionary expenditure. Give one example of each. (6)

Essential expenditure

Example

Discretionary expenditure

Example
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. Irish healthy eating guidelines encourage people to eat a variety of foods based on the Food Pyramid. Findings are presented below on the percentage of respondents consuming the recommended number of daily servings from each shelf of the Food Pyramid (1998 and 2007).


<table>
<thead>
<tr>
<th></th>
<th>1998 %</th>
<th>2007 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals, breads and potatoes (6+ daily servings)</td>
<td>40</td>
<td>26</td>
</tr>
<tr>
<td>Fruit and vegetables (4+ daily servings)</td>
<td>56</td>
<td>65</td>
</tr>
<tr>
<td>Milk, cheese and yoghurt products (3 daily servings)</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Meat, fish, poultry and alternatives (2 daily servings)</td>
<td>36</td>
<td>39</td>
</tr>
<tr>
<td>Top shelf: foods high in fats, sugar or salt (less than 3 daily servings)</td>
<td>14</td>
<td>14</td>
</tr>
</tbody>
</table>

(a) In relation to the information provided in the chart, comment and elaborate on the percentage of respondents consuming the recommended number of daily servings from each shelf of the Food Pyramid. (24)

(b) Identify and give an account of the main factors that are contributing to the prevalence of obesity in Ireland. (16)

(c) Outline the significance of fatty acids in the diet. (8)

(d) Describe the structure of each of the following:
   - cis fatty acids
   - trans fatty acids
   - omega 3 fatty acids. (12)

(e) Discuss how food labelling assists consumers in making informed food choices. (20)
2. ‘Given the priority for population dietary change there is a need for a greater understanding of the determinants that affect food choice.’

(The European Food Information Council)

(a) Discuss the importance of aesthetic awareness in relation to the choice and presentation of food. (12)

(b) (i) State, giving examples, when sensory analysis tests are used in the food industry.

(ii) Name three main categories of sensory analysis tests and state the main purpose of the tests in each category. (26)

(c) State the reasons why recipes may be modified / adapted. (12)

3. The shelf-life of a product is critical in determining both its quality and profitability.

(a) Discuss the causes of food spoilage in relation to the action of enzymes. (15)

(b) Name and give details of one type of food poisoning bacteria. Refer to:
   • conditions necessary for growth
   • source
   • reproduction / growth of bacteria
   • high risk foods. (20)

(c) Assess irradiation as a method of food preservation. (15)
4. Management may be defined as planning for and implementing the use of resources to meet demands.

(a) Discuss four factors that can influence the management of family resources. (20)

(b) You have been elected as chairperson of your school’s graduation committee. Using the management framework (inputs, throughputs and outputs), set out the plan for the event. (18)

(c) Give an account of the importance of decision making in family resource management. (12)

5. The family is an important setting in which health-related behaviours and attitudes are shaped.

(a) Explain the following sociological terms:
   • culture
   • norms
   • values
   • role. (12)

(b) Discuss the social, economic and technological changes that affect families in Ireland today. (24)

(c) Comment on the protection afforded to children under current Irish family law. Refer to two acts. (14)
Section C

Answer one elective question from this section.
Candidates who submitted Textiles, Fashion and Design coursework for examination may attempt only 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) Buildings in the countryside alter and influence the landscape profoundly and become focal points for the eye.

(i) Outline the historical development of housing styles in Ireland since the nineteenth century to the present day. (20)

(ii) Give an account of the specific housing requirements of the following groups:
   - families
   - single people
   - elderly people. (18)

(iii) Evaluate the adequacy of social housing provision in Ireland. (12)

and

1.(b) (i) Explain the underlying principle of one type of energy efficient lighting. (12)

(ii) Give details of three contemporary developments in lighting technology. (18)

or

1.(c) It is important to choose the correct flooring for your home or business. It must meet your individual lifestyle/business needs and be flexible and durable enough to withstand the rigours of daily life.

(i) Explain each of the following:
   - solid floors
   - suspended floors. (12)

(ii) Name and describe one semi-hard flooring and one soft flooring that you would recommend for a family living room. State the main advantage and the main disadvantage of each. (18)
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) Fashion is a revolving door. Trends change with the seasons and styles are constantly being revived and revamped.

(i) Evaluate current fashion trends in casual wear.
Refer to:
- colour and pattern
- line / shape
- accessories. (12)

(ii) Describe, with the aid of a diagram, one method of customising denim jeans in order to give them a unique look. (7)

(iii) Evaluate the design of the customised jeans with reference to function and aesthetic appeal. (6)

and

2.(b) Write a profile of one fabric made from manufactured fibres.
Refer to:
- name of fabric
- fibre production
- fabric properties
- fibre identification test. (15)

or

2.(c) The contribution that the fashion industry makes to the economy is often undervalued.

(i) Suggest how the Irish fashion industry can be promoted in order to give it wider recognition. (6)

(ii) Discuss, giving examples, the reasons for the growing popularity of textile craft work. (9)
Elective 3 – Social Studies (80 marks)
Candidates selecting this elective must answer 3(a) and either 3(b) or 3(c).

3.(a) In an age of austerity, high unemployment and street protests that focus on the harsh economic realities of the present day, there’s a sense that the world of secure employment and jobs with good benefits are a thing of the past.

(i) Differentiate between paid work and unpaid work. (10)

(ii) Discuss the impact of social, economic and technological change on patterns of work and work availability in Ireland. (25)

(iii) Identify and elaborate on the factors that affect an individual’s attitude to work. (15)

and

3.(b) (i) Discuss the extent and distribution of poverty in Ireland today. (20)

(ii) Name and set out details of one statutory response to eliminating poverty in Ireland. (10)

or

3.(c) In relation to primary schools there has been much discussion about the inherited pattern of denominational school patronage and the rights of citizens in a more culturally and religiously diverse contemporary Irish society.

(The Forum on Patronage and Pluralism in the Primary Sector, Report of the Forum’s Advisory group 2012)

Discuss primary level education in Ireland.
Refer to:

- choice / types of primary school
- curriculum offered
- educational supports / resources
- provision for pupils with special needs. (30)