Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination 2008
HOME ECONOMICS – SCIENTIFIC AND SOCIAL
HIGHER LEVEL

CENTRE STAMP

WEDNESDAY, 4 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 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 10 questions from this section.
Each question is worth 6 marks.
Write your answers in the spaces provided.

1. In relation to protein describe the formation of a peptide bond/link. (6)

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

2. Give one main function of potassium. (6)

__________________________________________________________________________

__________________________________________________________________________

List two good sources of potassium in the diet.
(i) ________________________________ (ii) ________________________________

3. How does osteoporosis affect the body? (6)

__________________________________________________________________________

__________________________________________________________________________

State two possible causes of this condition.
(i) ____________________________________________

(ii) __________________________________________
4. Complete the following table in relation to the pasteurisation of milk. (6)

<table>
<thead>
<tr>
<th>Method</th>
<th>Temperature</th>
<th>Time</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pasteurisation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Name three cereals grown for food production and give one example of a different product manufactured from each cereal. (6)

<table>
<thead>
<tr>
<th>Cereals</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. State one use of each of the following fungi in food production. (6)

- Moulds
  ____________________________________________

- Yeast
  ____________________________________________

- Large Fungi
  ____________________________________________

7. List three different classes of food additives and give one example of each class. (6)

<table>
<thead>
<tr>
<th>Class of Food Additive</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. Identify **three** different items of nutritional information that are generally included on pre-packed foods. (6)

(i) __________________________________________________________

(ii) __________________________________________________________

(iii) __________________________________________________________

9. State the function of **each** of the following parts of the microwave oven. (6)

*Transformer* __________________________________________________

____________________________________________________________________

____________________________________________________________________

*Magnetron* ______________________________________________________

____________________________________________________________________

____________________________________________________________________

10. State the purpose of consumer research. (6)

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Name **two** methods of consumer research.

(i) __________________________________________________________

(ii) __________________________________________________________
11. Identify two features of national housing policy in Ireland. (6)
   (i) ____________________________________________________________________
   ____________________________________________________________________
   (ii) ____________________________________________________________________
   ____________________________________________________________________

   (i) ____________________________________________________________________
   ____________________________________________________________________
   (ii) ____________________________________________________________________
   ____________________________________________________________________
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. ‘Fat is an essential part of our diet. Fat has health benefits but it also has a lot of negative aspects. Consumers must make informed decisions on the amount and type of fat included in their daily diet.’

(Consumer Choice)

The following table provides information on three commonly used products.
(Typical % values per 100g).

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Extra Light Spread</th>
<th>Original Spread</th>
<th>Butter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>188 kcal</td>
<td>531 kcal</td>
<td>744 kcal</td>
</tr>
<tr>
<td>Fat</td>
<td>18g</td>
<td>59g</td>
<td>82.2g</td>
</tr>
<tr>
<td>Saturated fatty acids</td>
<td>5.1g</td>
<td>12g</td>
<td>52.1g</td>
</tr>
<tr>
<td>Monounsaturated fatty acids</td>
<td>4.1g</td>
<td>17g</td>
<td>20.9g</td>
</tr>
<tr>
<td>Polyunsaturated fatty acids</td>
<td>8.8g</td>
<td>29.5g</td>
<td>2.8g</td>
</tr>
<tr>
<td>Omega 3 fatty acids</td>
<td>1.6g</td>
<td>3.5g</td>
<td>0.6g</td>
</tr>
<tr>
<td>Trans fatty acids</td>
<td>0.3g</td>
<td>0.5g</td>
<td>2.9g</td>
</tr>
</tbody>
</table>

(a) Using the information provided in the table, evaluate each of the three products described, having regard to current dietary advice on fat intake. (24)

(b) Describe the structure and give one example of each of the following:
   - saturated fatty acids
   - monounsaturated fatty acids
   - polyunsaturated fatty acids. (24)

(c) Write an explanatory note on each of the following properties of lipids:
   - rancidity
   - emulsification. (12)

(d) Explain how (i) advertising and (ii) a person’s health status might influence decision making when purchasing dairy products. (20)
2. ‘Fruit and vegetables are highly nutritious and an essential part of the diet, however only 21% of adult men and 19% of women in Ireland are meeting the current World Health Organisation target, with young children eating even less.’

(a) Discuss (i) the nutritional significance and (ii) the contribution to the diet of fruit and vegetables. (20)

(b) Suggest one method of food preservation which could be used to preserve a surplus of home-grown fruit or vegetables. Explain the underlying principle of the method of preservation you have selected. (15)

(c) Write an informative note on food irradiation. (15)

3. ‘In the hustle and bustle of today’s world, more and more people are eating convenience food and ‘food to go’…… however, poor handling practices can cause food poisoning.’

(a) Discuss the importance of temperature control during the storage and cooking/reheating of food in order to minimise the risk of food poisoning. (16)

(b) Describe the stages in a basic Hazard Analysis and Critical Control Point (HACCP) system for making a hot meat dish. Refer to (i) possible hazards and (ii) the corresponding control measures to be implemented. (24)

(c) Outline the role of the environmental health officer in relation to food safety. (10)
4. Developments in housing are influenced by lifestyle patterns and demographic trends.

(a) Discuss how (i) socio-economic factors and (ii) trends in housing development influence housing choices. (20)

(b) Identify and elaborate on the general terms and conditions that have to be fulfilled before a mortgage is granted. (20)

(c) Explain the term mortgage protection and state why mortgage protection is necessary. (10)

5. ‘Fewer than one in five households in Dublin City are now made up of the traditional family of husband, wife and children.’ (CSO Census of Population, 2006)

(a) Analyse the reasons for the decline of the traditional family in Irish society. (20)

(b) Describe how changing roles within the family have impacted on individuals and/or society. (18)

(c) Describe one strategy for resolving conflict within the family. (12)
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) Lifestyle & fashion trends are increasingly influencing design in the home. Many new houses are smaller, so the key requirement is to create a sociable living space that works efficiently for the modern family.

![House Plan – Ground Floor Layout](image)

(i) Suggest three changes you would make to the house plan, shown in the diagram above, in order to accommodate the needs of a couple with two young children. In each case give a reason for your recommendation. (18)

(ii) Describe two different wall finishes suitable for use in the house interior and state two properties of each finish. (14)

(iii) State, giving examples, how (i) ergonomics, (ii) technological developments and (iii) environmental factors influence house design/construction. (18)

and

1.(b) Rooms that are used for different activities require varying levels of thermal comfort which can be regulated by the use of a thermostat.

(i) Discuss levels of thermal comfort in relation to two rooms in the home. (12)

(ii) Explain the working principle of a thermostat and give examples of the use of thermostats in the home. (18)

or

1.(c) (i) In relation to household electricity supply describe each of the following:
- ring circuit
- miniature circuit breakers (MCB’s). (12)

(ii) Identify three potential inefficient uses of electricity in the home and outline the improvement strategy you would recommend in each case. (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) A company has asked a clothing manufacturer to design and make a uniform/suit suitable for the office staff. Fabric A and Fabric B, described below, are being considered.

<table>
<thead>
<tr>
<th></th>
<th>Fabric A</th>
<th>Fabric B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric Properties</td>
<td>• relatively weak</td>
<td>• very strong</td>
</tr>
<tr>
<td></td>
<td>• warm</td>
<td>• durable</td>
</tr>
<tr>
<td></td>
<td>• excellent absorbency</td>
<td>• excellent absorbency</td>
</tr>
<tr>
<td></td>
<td>• very elastic</td>
<td>• carries heat away from the body</td>
</tr>
<tr>
<td></td>
<td>• tailors well</td>
<td>• creases unless treated</td>
</tr>
<tr>
<td></td>
<td>• susceptible to pilling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• crease resistant</td>
<td></td>
</tr>
<tr>
<td>Fabric Care</td>
<td>• hand wash</td>
<td>• machine wash</td>
</tr>
<tr>
<td></td>
<td>• do not tumble dry</td>
<td>• iron while damp</td>
</tr>
</tbody>
</table>

(i) With the aid of the information given in the table above, select a fabric for the uniform/suit. Give reasons for your choice. (6)

(ii) Sketch the uniform/suit and describe how two principles of design have been applied in the design of the outfit. (13)

(iii) Name and describe a fabric performance test of your choice. (6)

and

2.(b) (i) Differentiate between regenerated fibres and synthetic fibres and give one example of each. (9)

(ii) Write an note on each of the following:
- blended fabric
- filament modification. (6)

or

2.(c) (i) Why is it sometimes necessary to modify a commercial pattern? (6)

(ii) Describe, with the aid of a diagram, one method of modifying a commercial pattern. (9)
Elective 3 – Social Studies (80 marks)
Candidates selecting this elective must answer 3(a) and either 3(b) or 3(c)

3.(a) ‘It would appear that an increasing number of parents in Ireland are now recognising the importance of early childhood education, with many looking to enrol their children in pre-schools and Montessori facilities.’

(Press release, 2007)

(i) Discuss the purpose of education in relation to the physical, emotional, moral and intellectual development of the child. (24)

(ii) Comment on how socio-economic status impacts on equality of opportunity in education. (15)

(iii) Name and give an account of one national initiative that improves access to education. (11)

and

3.(b) ‘Despite almost a decade of economic boom, Ireland still has a large proportion of people at risk of poverty.’

(CSO)

(i) In relation to the above statement discuss the extent and distribution of poverty in Ireland today. In your answer include reference to the cycle of deprivation in families. (20)

(ii) Name and give details of two government schemes that reduce expenditure for low-income families. (10)

or

3.(c) Requirements for childcare vary depending on family circumstances.

(i) Summarise the factors that can affect a family’s requirements for childcare. (12)

(ii) Evaluate two types of child care options. (18)