Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination, 2012
HOME ECONOMICS – SCIENTIFIC AND SOCIAL
HIGHER LEVEL

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

1. Give one main function of sodium in the diet. (6)

________________________________________________________________________
________________________________________________________________________

List two good dietary sources of sodium.
(i) ____________________________________  (ii) ____________________________________

2. Explain each of the following terms. (6)

(i) *Low-density lipoproteins (LDL)*
    ______________________________________________________________________
    ______________________________________________________________________

(ii) *High-density lipoproteins (HDL)*
    ______________________________________________________________________
    ______________________________________________________________________

3. Explain the role of emulsifiers in food production. (6)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
4. What are *speciality foods* and give *two* examples of such foods. (6)

(i) *Speciality foods* ____________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

(ii) *Examples* _________________________________________________________________

5. Complete the following table in relation to alternative (novel) protein foods. (6)

<table>
<thead>
<tr>
<th>Source</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant</td>
<td></td>
</tr>
<tr>
<td>Micro-organisms</td>
<td></td>
</tr>
</tbody>
</table>

6. Name *three* methods of heat transfer and give *one* example of a method of cooking that illustrates the use of each. (6)

<table>
<thead>
<tr>
<th>Method of Heat Transfer</th>
<th>Cooking Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Identify *three* major sectors of the Irish food industry. (6)

(i) ____________________________________________________________

(ii) __________________________________________________________

(iii) _________________________________________________________
8. In relation to moulds, identify parts A, B and C as shown on the diagram.  

A ______________________
B ______________________
C ______________________

9. Outline the protection provided to the consumer by the Consumer Information Act, 1978. Give two points.  

(i) ____________________________________________________________________
____________________________________________________________________

(ii) ____________________________________________________________________
____________________________________________________________________

10. Outline two benefits of private health insurance.  

(i) ____________________________________________________________________
____________________________________________________________________

(ii) ____________________________________________________________________
____________________________________________________________________
11. In relation to consumer research, differentiate between each of the following two methods:

(i) **Desk Research**

(ii) **Field Research**

12. Explain energy labelling in relation to household appliances.

Name two household appliances which carry an energy label.

(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. ‘Food-based dietary guidelines’ is the complete scientific term for a set of healthy eating messages provided for a population, in terms of how much and which types of foods to eat for good health. (Food Safety Authority of Ireland, FSAI)

New recommendations for food-based guidelines for healthy eating in Ireland were devised by the FSAI. An extract relating to the recommended servings per day for two food groups (bread/cereals and fruit & vegetables) is presented in the table below.

<table>
<thead>
<tr>
<th>Age</th>
<th>5-13 years</th>
<th>14-18 years</th>
<th>19-50 years</th>
<th>51+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bread, Cereals etc. Servings</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Gender Moderately active</td>
<td>3-5</td>
<td>3-4</td>
<td>5-7</td>
<td>4</td>
</tr>
<tr>
<td>Sedentary</td>
<td>3-5</td>
<td>3-4</td>
<td>4-5</td>
<td>3</td>
</tr>
<tr>
<td>Fruit &amp; Vegetables Servings</td>
<td>5</td>
<td>5</td>
<td>5-6</td>
<td>5</td>
</tr>
</tbody>
</table>

(a) In relation to the two food groups referred to in the table, comment and suggest reasons for the variations in the recommendations made. (24)

(b) Give an account of carbohydrates and refer to:
- the chemical structure of a monosaccharide
- the formation of disaccharides
- the hydrolysis of sugar to include inversion. (24)

(c) Discuss the importance of balancing energy intake and energy output. (12)

(d) Identify and discuss contemporary trends in food shopping practices. (20)
2. ‘Almost six in ten people are aware of the “five or more a day message” but on average Irish people claim to be eating only three portions of fruit and vegetables a day.’ (Bord Bia)

(a) Discuss the options available to consumers when selecting and purchasing fruit and vegetables. (12)

(b) Give details of the nutritional significance and the contribution to the diet of either fruit or vegetables. (20)

(c) Give an account of Vitamin A under each of the following headings:
   - biological functions
   - effects of deficiency
   - properties. (18)

3. ‘Food safety is a right not a privilege.’ (Safefood, 2007)

(a) To ensure that food is safe to eat, discuss the importance of each of the following:
   - food storage
   - cooking and reheating procedures
   - kitchen hygiene. (24)

(b) Name one method of home preservation that involves the application of heat and explain the principle involved. (16)

(c) Outline the role of the Department of Agriculture, Food and the Marine in food safety. (10)
4. ‘Buying a home is one of the most significant financial decisions you will make in your lifetime.’

(a) Discuss the factors which influence individual and family housing choices. Refer to each of the following:
   - economic factors
   - national housing policy
   - trends in housing developments.

(b) Name and describe one type of mortgage available to potential house buyers.

(c) Name and give details of one Local Authority scheme available to people in need of housing

5. ‘Today more than ever before, young people are recognised as having rights.’

(a) Outline four rights of children within the family.

(b) Discuss each of the following:
   - the difficulties that the family unit may experience when a child has special needs and
   - the difficulties that the family unit may experience when a parent has special needs.

(c) Write an informative note on the Childcare Act, 1991.
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) ‘If each of us becomes aware of our own power when it comes to energy efficiency and use it properly, we can collectively make a big difference to ourselves, our pockets and to the environment.’

(Sustainable Energy Authority of Ireland)

(i) Discuss four factors that should be considered when choosing a heating system for a new house. (16)

(ii) Describe one type of central heating system suitable for a family home and include reference to:
- fuel/energy source
- working principle to include methods of heat transfer
- impact on the environment. (24)

(iii) Explain, giving examples, how levels of thermal comfort in the home can be controlled. (10)

and

1.(b) (i) Discuss the importance of adequate ventilation in a house. (15)

(ii) Recommend one method of artificial ventilation suitable for a kitchen and describe the working principle of the method recommended. (15)

or

1.(c) Interior design involves determining the structure of a space, the needs of the occupants and the style that best suits both.

(i) State, giving examples, how each of the following may impact on the interior design of the home:
- function of the room
- cost
- environmental awareness. (18)

(ii) Explain two elements of design and give an example of the application of each in interior design. (12)
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)  ‘The economic climate and a fresh approach to fashion, has succeeded in turning many more fashion hounds towards the vintage fashion rails.’
(www.stylebible.ie)

(i)  Assess the effects of socio-economic influences on the clothing industry.  (15)

(ii) You have been invited to attend a friend’s 18th birthday party with a 1980’s theme. Sketch and describe the outfit you would wear to the party.  (10)

and

2.(b) (i)  Discuss why blended fabrics are popular in modern clothing.  (6)

(ii) Set out the results of a study you have undertaken on one blended fabric. Refer to:
- name
- properties
- uses.  (9)

or

2.(c) Fabric construction methods influence the appearance, properties and performance of the fabric.

In relation to textile manufacture, name and describe each of the following:
- one fabric construction technique
- one method of colour application
- one method of design application.  (15)
3.(a) The high level of joblessness and the continuing threat of unemployment are among the biggest issues adversely affecting the Irish economy. Figures released by the Central Statistics Office show that the standardised jobless rate increased to 14.4% in October 2011. Among those signing on were 93,013 Jobseeker’s Benefit claimants and 301,333 Jobseeker’s Allowance claimants.

<table>
<thead>
<tr>
<th>Year</th>
<th>Unemployment rates in Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>4.4%</td>
</tr>
<tr>
<td>2007</td>
<td>4.5%</td>
</tr>
<tr>
<td>2008</td>
<td>6.4%</td>
</tr>
<tr>
<td>2009</td>
<td>11.8%</td>
</tr>
<tr>
<td>2010</td>
<td>13.7%</td>
</tr>
<tr>
<td>2011</td>
<td>14.2%</td>
</tr>
</tbody>
</table>

(Seasonally adjusted standardised unemployment rates. Central Statistics Office)

(i) Having regard to the information provided above, discuss unemployment in Ireland. (20)

(ii) Analyse how each of the following has impacted on current rates of unemployment:

- geographical location
- the global economy
- the level of demand for products and services. (20)

(iii) Name and give details of one statutory response to creating employment. (10)

and

3.(b) Using your leisure time wisely will have long term benefits.

(i) Define leisure and discuss its value in today’s society. (18)

(ii) Discuss the factors that can influence a person’s choice of leisure activities. (12)

or

3.(c) (i) Discuss the principle factors that can affect a family’s requirements for childcare. (12)

(ii) Name and evaluate two types of childcare options that are available to parents. (18)