Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination, 2014
HOME ECONOMICS – SCIENTIFIC AND SOCIAL
HIGHER LEVEL

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

1. In relation to carbohydrates, explain each of the following properties:

   Caramelisation

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   Crystallisation

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

2. Complete the following table in relation to the digestion of lipids.

   Digestive Organ | Secretion | Enzyme | Product
   ---------------|-----------|--------|--------
   Small Intestine|           |        |        

3. Differentiate between the following and give one food source of each.

   Haem iron
   ________________________________________________________________
   ________________________________________________________________
   Source

   Non-haem iron
   ________________________________________________________________
   ________________________________________________________________
   Source
4. What is Basal Metabolic Rate (BMR)? (6)

Give two factors that determine a person’s basal metabolic rate.

(i) _____________________________________________________________

(ii) _____________________________________________________________

5. Name and explain the primary function of one national agency involved in the Irish Food Industry. (6)

Name __________________________________________________________

Function _________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

6. Classify cheese and give one example in each class. (6)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Explain the term functional food. (6)

Outline two health benefits of including functional foods in the diet.

(i) _____________________________________________________________

(ii) ____________________________________________________________
8. Complete the table below in relation to the use of micro-organisms in food production. (6)

<table>
<thead>
<tr>
<th>Micro-organisms</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactic acid bacteria</td>
<td></td>
</tr>
<tr>
<td>Lactobacillus bulgaricus</td>
<td></td>
</tr>
<tr>
<td>Yeast</td>
<td></td>
</tr>
</tbody>
</table>

9. What is Pay Related Social Insurance (PRSI)? (6)

___________________________________________________________________________
___________________________________________________________________________

Name **two** PRSI benefits.

(i) _______________________________________________________________

(ii) _______________________________________________________________

10. Identify **two** features of current National Housing Policy in Ireland. (6)

(i) _______________________________________________________________

(ii) _______________________________________________________________

11. Name a fire / flame retardant finish used on household furnishings. (6)

___________________________________________________________________________

Outline **two** effects of this finish.

(i) _______________________________________________________________

(ii) _______________________________________________________________
12. Explain how consumers / householders can contribute to sustainable waste management. Give two points. (6)

(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. Shown below in the table is the cost (€) and percentage (%) of the weekly social welfare allowance required to purchase the foods necessary for healthy eating for four households using three different grocery store outlets.

<table>
<thead>
<tr>
<th>Household</th>
<th>Multiple supermarket</th>
<th>Low cost shop</th>
<th>Local shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household 1</td>
<td>€132.40 29%</td>
<td>€114.80 25%</td>
<td>€255.40 56%</td>
</tr>
<tr>
<td>Adult man and woman, boy aged 5 years and boy aged 14 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(Total household requires 8200 calories per day)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household 2</td>
<td>€82.20 25%</td>
<td>€65.80 20%</td>
<td>€154.70 47%</td>
</tr>
<tr>
<td>Adult man and woman without children</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(Total household requires 4400 calories per day)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household 3</td>
<td>€32.40 14%</td>
<td>€27.00 12%</td>
<td>€54.00 23%</td>
</tr>
<tr>
<td>Woman aged 65+ years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(Total household requires 1800 calories per day)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household 4</td>
<td>€54.80 21%</td>
<td>€45.40 17%</td>
<td>€109.00 42%</td>
</tr>
<tr>
<td>Single adult woman with a boy aged 5 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(Total household requires 3400 calories per day)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) Evaluate shopping in the **three** grocery outlets referred to in the chart above. *(12)*

(b) Apart from family size, give **three** reasons for the variation in the percentage of income spent on food each week. *(12)*

(c) Protein rich foods are a significant cost for many families. Recommend a variety of low-cost protein foods and state how each can be incorporated into a healthy eating plan. *(9)*

(d) Give a detailed account of protein and refer to:
- classification (simple and conjugated) *(24)*
- supplementary value / complementary role *(8)*
- structure (primary, secondary and tertiary). *(15)*
2. ‘A thorough understanding of the factors which influence meat eating quality is imperative in order to produce a product consistently in line with consumer expectations.’ (Teagasc)

(a) Discuss the nutritional significance of meat in the diet. (20)

(b) Describe each of the following:
   - the factors that cause toughness in meat
   - two methods of tenderising meat. (15)

(c) Set out details of one process used to extend the shelf life of meat. In your answer refer to:
   - name of process
   - how the process is carried out to include the underlying principle involved
   - the effect of the process on meat. (15)

3. Outdoor dining is a great way to savour good food, company and the great outdoors.

(a) Outline a HACCP system that should be followed when preparing and barbequing food. Refer to potential hazards and the corresponding control measures that should be implemented. (24)

(b) Assess grilling / barbequing as a method of cooking. Refer to:
   - cooking / underlying principle
   - guidelines to follow in order to ensure palatability of food
   - effect on the nutritive value of food. (20)

(c) Differentiate between toxic food poisoning and infectious food poisoning. (6)
4. **Kitchen appliances play a prominent role in enhancing the performance of modern kitchens.**

   (a) Discuss the following factors that should be considered when selecting kitchen appliances for a family home:
      - sourcing consumer information
      - design
      - value for money.  

   (b) Set out details of a study you have undertaken on microwave ovens. Refer to each of the following:
      - construction and working principle
      - guidelines for use. 

   (c) Explain how the consumer can protect the environment when choosing, using and disposing of electrical appliances.  

5. **One of the most striking features of the family in Ireland during the last decades of the twentieth century is the rapid rate at which it has changed.**

   (a) Outline the historical development of the family in Ireland from the beginning of the twentieth century to the present day. 

   (b) (i) Give an account of each of the following functions of the family:
      - economic function
      - socialisation function
      - educational function.

      (ii) Explain how state interventions assist the family in carrying out these functions.  

   (c) Assess the role of grandparents in modern family life.  

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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) The design and construction of modern houses is undergoing radical change with particular emphasis on sustainable energy.

(i) Identify three areas of the house that should be insulated in order to reduce heat loss. Recommend a method of insulation for each area and explain the underlying principle of each method. (24)

(ii) Name and set out details of one renewable energy source you have studied. Include reference to:
   - source
   - advantages / disadvantages
   - sustainability. (14)

(iii) Write an informative note on the Building Energy Rating (BER) system. (12)

and

1.(b) From whole house revamps to room makeovers, tired and dated interiors can be transformed at relatively low expense.

(i) Discuss four factors that should be considered when planning the interior design of the home. (16)

(ii) Name and describe two different wall finishes suitable for use in a living room. State two properties of each finish. (14)

or

1.(c) Property has always been considered to be a good long-term investment and buying will probably save money in the long run compared to a life time of renting.

(i) Discuss the comparative costs of buying versus renting a house for a family. (15)

(ii) Write an informative note on the private rented accommodation sector. Give three points. (15)
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) Imelda May’s distinctive rockabilly style is iconic to the core and bold in its delivery – 50s all the way.

(i) Evaluate the design of the dress shown in the diagram above. Refer to:
- comfort
- aesthetic appeal
- current fashion trends. (15)

(ii) Discuss the significance of the elements of design when choosing clothing to flatter body size and shape. (10)

and

2.(b) (i) Name and describe a fabric construction technique suitable for cotton fabric. (9)

(ii) Give details of one functional fabric finish applied to enhance fabric performance. (6)

or

2.(c) Irish fashion and textile designers enjoy worldwide recognition.

(i) Discuss the challenges encountered by the clothing and textile industry in Ireland. (9)

(ii) Outline the work of one Irish designer in promoting Irish fashion. (6)
Elective 3 – Social Studies (80 marks)
Candidates selecting this elective must answer 3(a) and either 3(b) or 3(c).

3.(a) The drive to promote lifelong learning, and create a learning society, is at the heart of education policy developments within the European Union.

(i) Describe the provision of education in Ireland today with regard to adult and second chance education. (20)

(ii) Analyse the considerations that adults may take into account when deciding to return to education. (20)

(iii) Name and give details of one contemporary initiative aimed at improving equality of opportunity in education. (10)

and

3.(b) Social change has had a major impact on family life in Ireland today.

Discuss this statement in relation to:
- changing attitudes to marriage
- changes in traditional roles within the family
- the impact of modern communications technology. (30)

or

3.(c) Volunteering is the commitment of time and energy for the benefit of society and local communities.

(i) Discuss, giving examples, the role of voluntary work in the community. (18)

(ii) Evaluate the benefits to be gained from voluntary work by the volunteer. (12)
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