Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination, 2015
HOME ECONOMICS – SCIENTIFIC AND SOCIAL
HIGHER LEVEL

WEDNESDAY, 3 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. Explain protein deamination. (6)

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

2. Complete the table below in relation to carbohydrates. (6)

<table>
<thead>
<tr>
<th>Class</th>
<th>Example</th>
<th>Food source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monosaccharides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disaccharides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polysaccharides</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Enumerate three biological functions of water. (6)

(i) _____________________________

(ii) _____________________________

(iii) _____________________________

4. In relation to lipids explain each of the following: (6)

Smoke point _____________________________

__________________________________________________________________________

Flash point _____________________________

__________________________________________________________________________
5. State the nutritional significance of each of the following parts of the wheat grain. (6)

<table>
<thead>
<tr>
<th>Nutritional significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bran</td>
</tr>
<tr>
<td>Endosperm</td>
</tr>
<tr>
<td>Germ</td>
</tr>
</tbody>
</table>

6. Outline three conditions necessary to ensure accurate results when carrying out sensory analysis tests. (6)

(i) ___________________________________________________
(ii) ___________________________________________________
(iii) ___________________________________________________

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

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

8. Explain how two of the following assist in the control of enzymic food spoilage. (6)

<table>
<thead>
<tr>
<th>Blanching</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold temperatures</td>
<td></td>
</tr>
<tr>
<td>Acids</td>
<td></td>
</tr>
</tbody>
</table>
9. State the purpose of family resource management. (6)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

List the three components of management.

(i) ______________________________

(ii) ______________________________

(iii) ______________________________

10. State one advantage and one disadvantage of using credit to pay household utility bills. (6)

Advantage _______________________________________________________________
________________________________________________________________________
________________________________________________________________________

Disadvantage _____________________________________________________________
________________________________________________________________________
________________________________________________________________________

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

Thermostat _______________________________________________________________
________________________________________________________________________

Refrigerant _______________________________________________________________
________________________________________________________________________
12. Outline **two** functions of the Citizens Information Board.

(i) _______________________________________________________

(ii) ______________________________________________________

(iii) ______________________________________________________

(iv) ______________________________________________________
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 survey was conducted to identify the level and type of marketing of foodstuffs in post primary schools in the Republic of Ireland.**

   An extract from the summary of the main findings showed that a variety of food outlets e.g. tuck shops (53.2%), canteens (53.2%) and drinks vending machines (44.7%) are in operation in post-primary schools in Ireland, with a high proportion of schools also reporting a shop close to the grounds (64.4%).

   A variety of healthy foods are available through one or more of these outlets including water (92.1%), juice (78.4%), sandwiches (73.9%) and fruit (62%). However, confectionery (74.1%), salty snacks/crisps (57.2%), fizzy/high sugar drinks (51.8%), diet drinks (50.2%) and biscuits, cakes and pastries (32.6%) are also widely available.

   (a) Using the information given above, comment and elaborate on (i) the provision and (ii) the nutritional significance of the foods and beverages available to students in post primary schools. (24)

   (b) Poor food choices have contributed to 42% of teenage girls and 23% of teenage boys not getting enough calcium in their diet.

   Give an account of **calcium** and include reference to:
   - sources
   - biological functions
   - factors assisting/inhibiting absorption. (18)

   (c) Explain (i) what is osteoporosis;

   (ii) the main factors that increase the risk of developing osteoporosis. (18)

   (d) Discuss the role of parents in shaping their children’s food choices. (20)
2. Over 85% of adults in Ireland enjoy eggs at least once a week, with 56% of men and 47% of women eating eggs two to three times per week. (Bord Bia, 2014)

(a) Set out the results of a study you have carried out on eggs.
Refer to:
- nutritional significance
- contribution to the diet
- properties and related culinary uses. (40)

(b) Explain how quality is assured in egg production in order to minimise food safety risks. (10)

3. Micro-organisms are commonly used in the production of many foods.

(a) Discuss four conditions necessary for the growth of moulds. (16)

(b) Write a detailed account of one type of mould with reference to the following:
- name
- description/characteristics
- reproduction. (22)

(c) Outline the uses of micro-organisms in food production. (12)
4. Money management skills are vital to running the house as a financial unit.

(a) Analyse three social factors that affect household income. (18)

(b) Design a family budget (two adults and two young children) where the net weekly income is €650. Give a reason for the proposed allocation of income for each area of expenditure. (18)

(c) Recommend one type of savings scheme suitable for a family. Refer to:
   - name of institution
   - type of savings scheme
   - interest paid
   - ease of access to funds
   - tax payable. (14)

5. Each year thousands of couples get married in Ireland. The majority of these marriages begin with some form of official ceremony with Church ceremonies being the most popular. (Accord)

(a)  (i) Define marriage as it exists in Irish law.
     (ii) Set out the legal requirements for marriage in Ireland. (21)

(b) Discuss the rights and responsibilities of partners within a marriage relationship. (20)

(c) Outline the conditions required for granting a divorce under the Family Law (Divorce) Act, 1996. (9)
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) Today the kitchen is the new living room, a modern hybrid of a living room, kitchen and dining area.

   (i) Discuss the factors that influence the interior design of a contemporary style kitchen/living area for a family with a member who has special needs.
      Refer to each of the following:
      • ergonomics
      • aesthetic and comfort factors.  (18)

   (ii) Differentiate between thermoplastic and thermosetting plastics.
      Refer to:
      • properties
      • examples
      • uses.  (20)

   (iii) Outline the effects of condensation in the home and state how condensation may be reduced/prevented.  (12)

and

1.(b) (i) Name and explain three charges shown on a domestic electricity bill.  (12)

   (ii) Explain how each of the following impact on electrical safety:
      • fuses
      • miniature circuit breakers (MCBs)
      • earth wire.  (18)

or

1.(c) Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.  (Global Water Partnership)

   (i) Describe the cold water system in a house.  (15)

   (ii) Write an informative note on water with reference to each of the following:
      • sources of domestic water in rural or urban areas
      • water quality
      • water charges.  (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) Playsuits and jumpsuits have evolved from men’s clothing to chic and versatile garments and are important fashion staples in every person’s wardrobe.
   (i) Sketch and describe a playsuit/jumpsuit you would choose to wear for an occasion of your choice. (9)
   (ii) You plan to make the garment. Give details of each of the following:
       - body measurements required
       - type of fabric you would select and reason for choice
       - outline plan of work to assemble the garment. (16)

2.(b) Write a profile of one fabric manufactured from natural fibres. Refer to:
       - fibre production
       - fabric properties
       - uses. (15)

or

2.(c) As a practice of expression and as a way to individualism it is obvious that music and fashion are closely linked.
   (i) Discuss, giving examples, how music and/or musicians have influenced trends in fashion over the years. (6)
   (ii) Give examples of how a garment can be restyled to reflect a modern trend. (9)
Elective 3 – Social Studies (80 marks)
Candidates selecting this elective must answer 3(a) and either 3(b) or 3(c).

3.(a) While the improvement in the Irish economy is creating more opportunities for people to find work, there remains significant challenges in terms of youth and long-term unemployment. *(The Irish Times, November 2014)*

(i) Discuss how changes in the availability of work have affected individuals and families in Ireland. (20)

(ii) Discuss, giving examples, how flexibility in working hours has impacted on work/life balance for many people. (20)

(iii) Name and give details of one statutory initiative aimed at creating employment. (10)

and

3.(b) (i) Evaluate three supports that are available to improve the accessibility of second-level education for all students. (15)

(ii) Explain, giving examples, how education prepares students for participation in employment. (15)

or

3.(c) Although an individual's leisure can often be affected by numerous external factors such as age, race, income and gender, there is no denying the benefits of incorporating a small amount of leisure into a person’s routine.

(i) Discuss, giving examples, the role of leisure activities in personal development. Refer to the following factors:

- physical
- social
- emotional. (18)

(ii) Name and evaluate two leisure facilities popular with retired people. (12)