Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination, 2017
HOME ECONOMICS – SCIENTIFIC AND SOCIAL
HIGHER LEVEL

CENTRE STAMP

WEDNESDAY, 7 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 only attempt Elective 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. Amino acids are the building blocks of protein. Explain and give an example of each of the following terms: (6)

   Essential amino acids

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   Example ______________________________________________________

   Non-essential amino acids

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   Example ______________________________________________________

2. Describe the effect of gelatinisation on starch. (6)

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   Give two culinary examples of gelatinisation.

   (i) __________________________________________ (ii) __________________________

3. Outline the role of the Food Safety Authority of Ireland (FSAI) in the food industry. (6)

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
4. Complete the following table in relation to anaemia. (6)

<table>
<thead>
<tr>
<th>Cause</th>
<th>Effect of deficiency</th>
<th>Corrective measure</th>
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</thead>
<tbody>
<tr>
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</tbody>
</table>

5. Explain each of the following: (6)

- Modified atmosphere packaging ______________________________
  ___________________________________________________________
  ___________________________________________________________
- Biodegradable packaging ______________________________
  ___________________________________________________________
  ___________________________________________________________

6. Name and describe two common food poisoning bacteria using the headings below. (6)

<table>
<thead>
<tr>
<th>Food poisoning bacteria</th>
<th>Description / characteristic</th>
<th>Habitat</th>
</tr>
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<tbody>
<tr>
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</tbody>
</table>
7. Explain the process of fermentation.  

_________________________________________________________________________  

_________________________________________________________________________  

Name two by-products of fermentation.  

(i) ___________________________  (ii) ___________________________

8. Complete the table below in relation to the processing of milk.  

<table>
<thead>
<tr>
<th>Process</th>
<th>Temperature</th>
<th>Time</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultra Heat Treatment</td>
<td></td>
<td></td>
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</tbody>
</table>

9. Name three components / stages in family resource management.  

_________________________________________________________________________  

_________________________________________________________________________  

_________________________________________________________________________  

Give two examples of family life which require management skills.  

(i) ___________________________  

(ii) ___________________________
10. Explain each of the following: 

Insurance premium
________________________________________________________________________

Insurance policy
________________________________________________________________________

11. Name three social welfare payments available to individuals. 

(i)  
_____________________________________________________________________

(ii)  
_____________________________________________________________________

(iii)  
_____________________________________________________________________

12. What protection is provided to the consumer by the Consumer Information Act, 1978 / Consumer Protection Act, 2007? 

(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. Rising levels of overweight and obesity are placing an increasing burden on individuals and society. Currently, six in ten adults and one in four children are overweight or obese.

\[\text{(A Healthy Weight for Ireland: Obesity Policy and Action Plan 2016 – 2025)}\]

Body Mass Index (BMI) is a standardised measure used to estimate whether or not someone is underweight, normal weight, overweight or obese.

![BMI of the Irish population (by age group)](image)

(a) Using the information provided in the chart, comment and elaborate on the variations in Body Mass Index among the different age groups of the Irish population. (20)

(b) Classify carbohydrates.
   With reference to each class give:
   - the chemical formula
   - examples
   - food source. (15)

(c) Explain three properties of sugar and the related culinary use of each. (15)

(d) Assess the effects of high sugar consumption on the body. (10)

(e) The rate of obesity in Ireland has been increasing despite the fact that it is preventable.
   Outline five strategies to be considered when purchasing and preparing food in order to reduce sugar consumption. (20)
2. Ireland produces more farmhouse cheese varieties per capita than any other country in the world. Our reputation for quality extends overseas, with Ireland exporting 90% of the cheese it produces. 

(The National Dairy Council)

(a) Evaluate the nutritional value and the dietetic contribution of cheese to the diet. (20)

(b) Describe the production of cheese.
   Refer to:
   • stages of production
   • packaging and labelling. (18)

(c) Discuss the role of artisan producers / small businesses in the Irish food industry. (12)

3. The ‘taste’ experience is an accumulation of multiple senses.

(a) Discuss the influence of the senses when choosing, cooking and eating food. (16)

(b) Outline four conditions required for sensory analysis testing. (16)

(c) Write a detailed account of one difference test used in the food industry.
   Refer to:
   • name of test
   • aim
   • implementation. (18)
4. Everyone needs a home: a secure, comfortable place in a pleasant and sustainable community; a place to rear a family if they so wish and to grow old in serenity.  

(Social Housing Strategy, 2020)

(a) Analyse the factors that influence housing choices.  
Refer to:  

• socio-economic factors  
• availability of housing  
• national housing policy.  

(b) Outline the conditions that are required in order to qualify for mortgage approval.  

(c) Name and describe one type of mortgage available to house purchasers.  

5. Marriage is still very popular in Ireland. In 2015, religious ceremonies accounted for the highest proportion of marriages (66.3%). Civil ceremonies were the most popular choice for non-religious marriage ceremonies (28%). In recent years the Humanist Association has also risen in popularity with 5.7% of marriages.  

(Central Statistics Office, 2016)

(a) Outline the variations that exist in marriages today.  

(b) Discuss the benefits of pre-marriage courses for couples preparing for marriage.  

(c) Evaluate each of the following options available to couples experiencing difficulties in their marriage:  

• marriage counselling  
• family mediation  
• legal separation.
Section C

Answer one elective question from this section.

Candidates who submitted Textiles, Fashion and Design coursework for examination may only attempt elective 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 Murphy family live in a bungalow with their two children, John (11 years) and Emily (4 years).

(i) Evaluate the suitability of the home for the family’s present and future needs. Suggest modifications, if required. (20)

(ii) Identify potential energy inefficiencies in a home and suggest strategies for improvement. (15)

(iii) Write an informative note on the Building Energy Rating (BER) certificate. (15)

1.(b) To the greatest extent possible, every household in Ireland will have access to secure, good quality housing suited to their needs at an affordable price and in a sustainable community.

(Vision Statement: Department of Housing, Planning, Community and Local Government)

(i) Evaluate the adequacy of social housing provision in Ireland. (18)

(ii) Comment on the importance of each of the following services for new housing developments:

- schools
- transport
- refuse collection. (12)

or

1.(c) Proper ventilation is vital to a family’s health and comfort.

(i) Outline the importance of adequate ventilation in the home. (12)

(ii) Recommend one natural and one artificial method of ventilation suitable for a kitchen / living area. Explain the underlying principle of each method. (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) The athleisure trend is turning workout wear into a serious style statement. People of every age are wearing workout clothes all day.

(i) Comment on the outfit shown in the picture above. Refer to:
   - comfort
   - aesthetic appeal
   - current fashion trend. (15)

(ii) Discuss the influence of trend setters and the media on fashion. (10)

2.(b) Blending is combining different fibres together to achieve a desired product characteristic.

Write a profile of one blended fabric. Refer to:
   - fibre production
   - fabric properties
   - uses. (15)

or

2.(c) The textile and fashion industry is one which is market-driven, with high levels of skill, imagination and creativity.

(i) Outline how the Irish fashion industry is promoted at home and abroad. (9)

(ii) Name and give details of one career opportunity in the textile and fashion industry. (6)
Elective 3 – Social Studies (80 marks)
Candidates selecting this elective must answer 3(a) and either 3(b) or 3(c).

3.(a) Unemployment in Ireland is now at its lowest level since December 2008. Total numbers unemployed have now fallen by 52% from the 327,000 peak recorded in 2011.

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<tr>
<td></td>
<td>15.1%</td>
<td>14.1%</td>
<td>12.2%</td>
<td>10.2%</td>
<td>8.9%</td>
<td>7.2%</td>
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</table>

(The Irish Times, 2016)

(i) Comment on the information provided above and analyse why unemployment rates have changed in Ireland. (20)

(ii) Discuss the effects of unemployment on individuals, families and society. (20)

(iii) Name and give details of one scheme to reduce expenditure for low-income families. (10)

and

3.(b) The percentage of men exceeds the percentage of women in the labour force.

(i) Analyse the factors that influence the participation of women in employment. (15)

(ii) Comment and elaborate on the childcare options available for working parents. (15)

or

3.(c) The number of people emigrating remains high, despite improvements in the economy and a fall in unemployment.

(i) People often move from place to place in search of work, discuss the impact this has on individuals and their families. (20)

(ii) Outline how a person’s work ethic influences their attitude to work. (10)
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