Coimisiún na Scrúduithe Stáit  
State Examinations Commission  

Leaving Certificate Examination, 2010  

HOME ECONOMICS – SCIENTIFIC AND SOCIAL  

ORDINARY LEVEL  

WEDNESDAY, 9 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. List the four elements found in proteins. (6)
   (i) ____________________________________________________________
   (ii) ___________________________________________________________
   (iii) ___________________________________________________________
   (iv) ___________________________________________________________

   Give one source of each of the following proteins.
   Animal _________________________________________________________
   Plant (Vegetable) _______________________________________________

2. Complete the following statement in relation to the biological functions of carbohydrates using the words listed below. (6)
   "liver energy cellulose"
   Glucose releases heat and ________________.
   Excess glucose is stored as energy in the ___________ and muscles.
   ____________ stimulates the movement of food through the bowel.

3. Explain two of the following properties of lipids (fats): (6)
   Melting Point _________________________________________________
   _____________________________________________________________
   Smoke Point _________________________________________________
   _____________________________________________________________
   Flash Point _________________________________________________
4. In relation to vitamins, indicate with a tick (✓) whether each of the following statements is true or false.  

<table>
<thead>
<tr>
<th>Vitamins</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>Night blindness is a result of a deficiency of Vitamin A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin C is essential for the absorption of iron</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin B is a fat-soluble vitamin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Outline three current nutritional guidelines (healthy eating guidelines) that are especially relevant for an obese person.

(i) ____________________________________________
(ii) __________________________________________
(iii) __________________________________________

6. Name two government departments or agencies that have a role in the food and drinks industry.

(i) ____________________________________________
(ii) __________________________________________

List two career opportunities in the food industry.

(i) ____________________________________________
(ii) __________________________________________

7. Name three types of flour used in home baking and give one different culinary use of each.

<table>
<thead>
<tr>
<th>Type of flour</th>
<th>Culinary use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
<td>3.</td>
</tr>
</tbody>
</table>
8.  Set out in the table are classes (types) of food additives. Match each class with the correct example using the examples listed. (6)

   Examples: herbs and spices, vitamin E, turmeric.

<table>
<thead>
<tr>
<th>Classes of Food Additives</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colourings</td>
<td></td>
</tr>
<tr>
<td>Flavourings</td>
<td></td>
</tr>
<tr>
<td>Antioxidants</td>
<td></td>
</tr>
</tbody>
</table>

9. State the purpose of labelling on household cleaning agents. (6)

   ______________________________________________________________________________
   ______________________________________________________________________________

Identify and explain this hazard symbol.

   ___________________________________________________
   ___________________________________________________
   ___________________________________________________
   ___________________________________________________

10. Outline two advantages of planning a household budget. (6)

    (i) ___________________________________________________________________________
    (ii) ___________________________________________________________________________

   What protection does life assurance give to a person or family?

   ______________________________________________________________________________
11. State three ways that technological developments have contributed to greater efficiency in the management of the home. (6)

(i) _____________________________________________________________

(ii) ____________________________________________________________

(iii) ___________________________________________________________

12. Explain two of the following methods of payment used for goods and services. (6)

Credit Card _______________________________________________________

Laser Card _______________________________________________________

Direct Debit / Standing Order _______________________________________
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. ‘Dem bones, dem bones need calcium….’
   Ninety per cent of the adult skeleton is formed by the age of 17 years. Bone continues to grow during the 20s but from the mid 30s onwards the skeleton starts to weaken slowly.
   (National Dairy Council)

   The table below shows nutritional information, per 100g, for whole and semi-skimmed milk.

<table>
<thead>
<tr>
<th></th>
<th>Whole Milk</th>
<th>Semi-skimmed Milk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy kcal</td>
<td>66</td>
<td>46</td>
</tr>
<tr>
<td>Protein (g)</td>
<td>3.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Carbohydrates (g)</td>
<td>4.6</td>
<td>4.7</td>
</tr>
<tr>
<td>Fat (g)</td>
<td>3.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Saturated fatty acids (g)</td>
<td>2.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Calcium</td>
<td>118</td>
<td>120</td>
</tr>
<tr>
<td>Iron (mg)</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>Vitamin A (Retinol)</td>
<td>30</td>
<td>19</td>
</tr>
<tr>
<td>Folate</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

(a) Identify the three main differences between whole milk and semi-skimmed milk. (9)

(b) Give an account of the dietetic value of semi-skimmed milk. (15)

(c) Set out the results of a study you have carried out on calcium.
    Refer to each of the following:
    • sources in the diet
    • functions in the body
    • effects of deficiency
    • factors that affect absorption. (36)

(d) Discuss how the food industry has responded to consumer demands through the development of new and value-added food products. (20)
2. ‘Meat plays a central role in the Irish diet providing a significant contribution to the intakes of the key nutrients.’ *(An Bord Bia)*

(a) Describe the nutritive value of meat in the diet. (20)

(b) Using meat as the main ingredient design a two course menu suitable for the main meal of the day for a family on a low income. Give reasons for your choice of foods. (14)

(c) Processed meats are popular consumer products. Name two types of processed meat and state one advantage of each. (16)

3. All home preservation is based on the principle of preventing enzymes and microorganisms from causing food to decay.

(a) State four of the main causes of food spoilage. (16)

(b) Give an account of one method of food preservation used in the home. Refer to:
   - method of preservation
   - suitable foods
   - how this method of preservation is carried out
   - packaging. (24)

(c) Outline two uses of micro-organisms in food production. (10)
4. Jim and Ann are a couple with two young pre-school children. They are both working outside the home. The children attend play school every morning. Recently their washing machine has broken down.

(a) Discuss four factors that Ann and Jim need to consider when planning the purchase of a new washing machine. (20)

(b) Explain how Jim and Ann could use the *Small Claims Procedure* if the washing machine they purchase is faulty and they cannot get redress from the shop. (12)

(c) Identify two main sources of income and four main areas of expenditure (spending) for this family. (18)

5. ‘The effects of disadvantage can last a lifetime. It’s true that children have amazing abilities to cope, but the wrong start can affect the direction of their whole lives.’

(www.barnardos.ie)

(a) With reference to the above statement, identify and explain the physical and psychological (emotional) needs of young children. (15)

(b) Give an account of four rights of children within the family. (20)

(c) Explain, giving examples, how the state provides support to children who are disadvantaged. (15)
Section C

Answer one 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 diagram below shows the floor plan of a two-bedroom house.

![Floor Plan Diagram]

(i) Assess the suitability of the house plan, shown above, for a family of one parent and two children aged 13 and 4 years. (20)

(ii) Describe three factors that might influence a person’s choice of location when building a house. (15)

(iii) In relation to house building and purchase explain the role of each of the following: (a) the architect, (b) the surveyor and (c) the solicitor. (15)

and

1.(b) Awareness of energy efficiency has increased significantly in recent years.

(i) Identify three areas in the home where energy inefficiencies may occur and in relation to each suggest one method of improving efficiency. (18)

(ii) State the advantages / the disadvantages of solar energy. (12)

or

1.(c) Floral prints, checks and stripes are examples of pattern used in interior design.

(i) Explain, giving examples, how pattern may be used to enhance (improve) the appearance of a room. (12)

(ii) Suggest two types of flooring suitable for a sitting room. State two properties of each. (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)

(i) Comment on current fashion trends (male and female) as shown in the photograph above. Refer to:
   - colour / pattern
   - fashion influences
   - the use of accessories. (18)

(ii) Name and describe one method of applying a design to a jacket. (7)

and

2.(b)

(i) Outline the contribution of cottage industries to the Irish clothing and textile industry. (9)

(ii) State two reasons why career opportunities in the Irish clothing industry have declined. (6)

or

2.(c) Synthetic and regenerated fibres are increasingly used in the production of modern textiles.

Write a profile of a fabric made from manufactured fibre under the following headings:

- fibre production
- properties
- fabric uses. (15)
Elective 3 - Social Studies (80 marks)
Candidates selecting this elective must answer 3 (a) and either 3 (b) or 3 (c).

3.(a) ‘Ireland has moved from having the second lowest unemployment rate among the EU-15 countries two years ago to the second highest.’ *(Irish Independent, July 2009)*

(i) Discuss the effects of unemployment on
   - the family unit
   - the individual
   - society. *(20)*

(ii) Outline the benefits of voluntary work to (a) the unemployed person and (b) the community. *(16)*

(iii) Give details of two different types of support provided by voluntary organisations to families when the main wage earner is unemployed. *(14)*

and

3.(b) ‘A litany of serious neglect in childcare standards at crèches and Montessori schools can be revealed today’. *(Irish Independent, September 2009)*

(i) Outline the reasons why each of the following is important in crèches / pre-schools:
   - adequate levels of supervision
   - sufficient resources
   - high levels of hygiene and safety. *(18)*

(ii) Explain how attending pre-school can assist a child’s development. *(12)*

or

3.(c) The notion that work in the home is becoming evenly distributed among the sexes is a myth. Research shows that women are responsible for 86% of child supervision, 82% of care of adults and 80% of cooking. *(Report from The National Women’s Council of Ireland, October 2009)*

Discuss how the burden of home care duties can affect women in relation to three of the following:
   - health
   - employment opportunities
   - leisure time
   - pension entitlements. *(30)*
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