Instructions to Candidates

Section A  There are twelve questions in this section.
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.
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.
Answer one elective question, to include part (a) and either part (b) or part (c).
If you submitted Textiles, Fashion and Design coursework for examination, you may only attempt 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 this 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. Complete the table below in relation to the digestion of carbohydrates. (6)

<table>
<thead>
<tr>
<th>Organ</th>
<th>Enzyme</th>
<th>Substrate</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pancreas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Intestine</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. State three functions of Vitamin C in the body. (6)

(i) ____________________________________________________________
(ii) __________________________________________________________
(iii) __________________________________________________________

3. Name two proteins found in meat. (6)

(i) __________________________________________________________
(ii) __________________________________________________________

Outline two effects of cooking on protein in meat.

(i) __________________________________________________________
(ii) __________________________________________________________
4. Outline the role of energy in the body. (6)
   (i) ____________________________________________
   (ii) __________________________________________
   (iii) __________________________________________

5. Explain the significance of the following symbol to the consumer. (6)
   ____________________________
   ____________________________
   ____________________________

   Name two products that use this symbol on their labelling.
   (i) ____________________________  (ii) ____________________________

6. Complete the table below in relation to processed food. Give one example of a different food / product in each case. (6)

<table>
<thead>
<tr>
<th>Food / Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foods that are extensively processed</td>
</tr>
<tr>
<td>Foods processed to extend shelf life</td>
</tr>
<tr>
<td>Fortified foods</td>
</tr>
</tbody>
</table>
7. Explain each of the following methods of heat transfer when cooking food. (6)

Conduction
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

Convection
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

8. State the temperature range for optimum growth for each of the following groups of micro-organisms. (6)

<table>
<thead>
<tr>
<th>Micro-organisms</th>
<th>Temperature Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychrophiles</td>
<td></td>
</tr>
<tr>
<td>Mesophiles</td>
<td></td>
</tr>
<tr>
<td>Thermophiles</td>
<td></td>
</tr>
</tbody>
</table>

9. Suggest two textiles suitable for use in the home and state one property of each. (6)

<table>
<thead>
<tr>
<th>Textile</th>
<th>Property</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name one fire retardant finish used on household textiles.
___________________________________________________________________________
10. Explain how advertising affects consumers’ buying behaviour. (6)

(i) 
_______________________________________________________________________
_______________________________________________________________________

(ii) 
_______________________________________________________________________
_______________________________________________________________________

11. State two advantages of regular saving. (6)

(i) 
_______________________________________________________________________
_______________________________________________________________________

(ii) 
_______________________________________________________________________
_______________________________________________________________________

Name two saving schemes offered by financial institutions.

(i) ____________________________ (ii) ____________________________

12. In relation to a person’s income, explain each of the following: (6)

Tax Credit 
_______________________________________________________________________
_______________________________________________________________________

USC 
_______________________________________________________________________
_______________________________________________________________________
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. Calorie menu labelling in restaurants can help combat obesity even where only modest changes occur in consumer behaviour. (Calories on menus in Ireland, FSAI)

Sample Main Course Menu

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grilled Irish Salmon</td>
<td>387 cal</td>
</tr>
<tr>
<td>Chicken Tikka Masala</td>
<td>883 cal</td>
</tr>
<tr>
<td>Beer Battered Fish &amp; Chips</td>
<td>880 cal</td>
</tr>
<tr>
<td>Chilli Con Carne</td>
<td>662 cal</td>
</tr>
<tr>
<td>Roast Vegetable Pasta</td>
<td>747 cal</td>
</tr>
<tr>
<td>Fish Pie</td>
<td>756 cal</td>
</tr>
</tbody>
</table>

(a) With reference to the sample menu above, comment and elaborate on the suitability of the menu options for a person on a weight reducing diet. In your answer, suggest modifications to the dishes for a healthier menu. (24)

(b) In relation to lipids, state the elemental composition and describe the chemical structure of a triglyceride. (9)

(c) Describe the structure and give one example of each of the following:
- saturated fatty acids
- monounsaturated fatty acids
- polyunsaturated fatty acids. (18)

(d) Outline the significance of fatty acids in the diet. (9)

(e) The aim of food labelling is to provide consumers with information which may influence their purchasing decisions.
In addition to nutritional information, discuss the reasons why consumers consult food labels on pre-packaged food prior to purchase. (20)
2. Vegetarian diets are a popular choice with many individuals and families.
   
   (a) In relation to vegetarian diets discuss:
   
   - classes / types
   - specific dietary requirements
   - benefits of a vegetarian diet. (30)
   
   (b) Name and describe two novel (alternative) protein foods that can be used in vegetarian diets. (8)
   
   (c) Outline the manufacture / production of one novel (alternative) protein food. (12)
   
3. Many modern processed products such as low calorie, snack and ready to eat convenience foods, would not be possible without the use of food additives.
   
   (a) What is a processed food?
   Evaluate the merits of incorporating processed foods in the diet. (20)
   
   (b) Give an informative account of flavourings and antioxidants.
   Refer to:
   
   - classes / types
   - examples
   - functions
   - use. (20)
   
   (c) Explain how the use of food additives is regulated by European Union (EU) legislation. (10)
4. Smart home technology is the automation and management of your home and daily life.

(a) Discuss how technology has contributed to the efficient management of the home.  

(b) Set out details of a study that you have undertaken on a refrigeration appliance. Refer to:
   - working principle
   - guidelines for use
   - modern features.  

(c) Evaluate the role of energy labelling when selecting household appliances.  

5. ‘There can be no keener revelation of a society’s soul than the way in which it treats its children’. (Nelson Mandela)

(a) Identify and explain the rights of children in society today.  

(b) Discuss the possible causes of conflict between adolescents and adults. Suggest strategies for resolving this conflict.  

(c) Outline the protection available for families under the Family Law (Maintenance of Spouses and Children) Act, 1976.
Section C

Answer one elective question from this section.
If you submitted Textiles, Fashion and Design coursework for examination, you may only attempt Question 2 from this section.

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) According to CSO figures, 896 families were homeless on census night including 1,726 children in those families. (Central Statistics Office, 2016)

(i) Outline the housing requirements necessary to meet the needs of people who are homeless. (16)

(ii) Give an informative account of the quality of accommodation provided in each of the following housing sectors:

- private housing sector / owner occupied
- private rental sector. (18)

(iii) Discuss the importance of house building standards with reference to how building standards are regulated. (16)

1.(b) Well-chosen floor coverings provide style and beauty and improve the aesthetics of a room.

(i) Outline four factors that should be considered when selecting floor coverings for a home. (12)

(ii) Describe three types of flooring / floor coverings used in the home. List the properties of each. (18)

or

1.(c) Sustainable energy improves people's lives, brings comfort and convenience and addresses environmental challenges. (Sustainable Energy Authority of Ireland)

(i) Identify and elaborate on three sources of energy supply to the home. Comment on the sustainability of each of these energy sources. (15)

(ii) Give an account of the emissions produced from burning fuels in the home and the effect these emissions have on the environment. (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) ‘Fashion is a trend, style lives within a person.’ (Oscar de la Renta)

(i) Assess the role of fashion as an expression of personality, with reference to the picture above. (15)

(ii) Analyse the technological influences on the design and construction of clothing. (10)

and

2.(b) Natural fibres are a sustainable resource as they can be used without depleting or damaging the environment.

(i) Classify natural fibres, giving examples and uses in each case. (9)

(ii) Explain how fibres can be identified using a burning test. Give one example. (6)

or

2.(c) A commercial pattern reflects the designer’s vision for the outfit.

(i) Suggest reasons why commercial patterns may require modification. (9)

(ii) Describe one method of modification to a commercial pattern. (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 demand for education is growing. Adults with higher educational attainment have better economic outcomes. *(Education at a Glance 2017, OECD)*

(i) Name and describe two programmes provided in second level education. Refer to:
- curriculum offered
- assessment / examination system. *(20)*

(ii) Analyse the factors that influence educational achievement. *(15)*

(iii) Evaluate equality of opportunity in second level education with reference to students at risk of disadvantage and social exclusion. *(15)*

and

3.(b) Volunteering enriches individuals’ lives and the communities in which they live.

(i) Discuss, with examples, how a community can benefit from the work of volunteers. *(15)*

(ii) Explain how a volunteer can benefit personally by participating in community projects. *(15)*

or

3.(c) Leisure is an important component of daily life and a core ingredient for overall well-being.

(i) Discuss the value of leisure in today’s society. *(15)*

(ii) Analyse the social and cultural factors that influence an individual’s choice of leisure activities. *(15)*