



Coimisiún na Scrúduithe Stáit
State Examinations Commission

LEAVING CERTIFICATE EXAMINATION 2017

**HOME ECONOMICS
SCIENTIFIC AND SOCIAL**

CHIEF EXAMINER'S REPORT

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1. Introduction

This Chief Examiner's report provides a review of the performance of candidates in the 2017 Leaving Certificate Home Economics Scientific and Social examinations. It provides an analysis of candidate achievement at both Higher level and Ordinary level for the three components assessed in Home Economics – Scientific and Social: the written examination, the Food Studies Practical Coursework and the Textiles, Fashion and Design coursework. Tables of relevant statistical information are given in the appendix.

This report should be read in conjunction with the examination papers, the published marking schemes and the syllabus for this subject. The examination papers and marking schemes are available on the State Examination Commission's website www.examinations.ie and the syllabus is available at www.curriculumonline.ie

1.1 Syllabus Structure

A revised syllabus for Home Economics – Scientific and Social was introduced to the Senior Cycle Curriculum in September 2002 and was first examined in the leaving Certificate in 2004. Home Economics – Scientific and Social is an applied subject combining theory and practice in order to develop understanding and solve problems. Home Economics focuses on the acquisition of knowledge and the development of skills and attitudes that will enable students to take control of their own lives at present and in the future. It emphasises the interdependent relationship that exists between individuals and families and their immediate and distant environments and promotes a sense of responsibility towards sustaining resources within those environments.

The syllabus is designed as a common level syllabus and differentiated into Higher and Ordinary level in terms of range of material and depth of treatment. All Ordinary level material forms part of the Higher level syllabus, whereas some material, which is an extension of Ordinary level material, has been designated Higher level only. This Higher level material is shown in black text throughout the syllabus. Higher level requires a greater depth of understanding of concepts, processes and principles and a greater degree of proficiency in skills. Practical work is an integral component of the syllabus, practical activities provide opportunities for achieving the syllabus objectives as the content is studied.

2. What does the examination test?

The syllabus is assessed in accordance with its objectives. In any year the examination assesses a representative range of elements from the syllabus. The syllabus structure comprises a mandatory core (80%) and one elective selected from a choice of three (20%). The core consists of three areas with the following weightings: Food Studies (45%), Resource Management and Consumer Studies (25%) and Social Studies (10%). The three electives are: Home Design and Management (20%), Textiles, Fashion and Design - written 10%, practical 10%, (20%), and Social Studies (20%). The written examinations in this subject are assessed at Higher and Ordinary levels while the coursework components are assessed at a Common level.

2.1 Written examination

Assessment at Higher and Ordinary level is through a terminal written examination (80%), of two and a half hours duration. The maximum mark that can be obtained is 320 for those candidates opting for the Social Studies elective and 280 for those who choose the Textiles, Fashion and Design elective (see Table 1 below). The two examination papers, Higher level and Ordinary level, have the same structure and rubrics. Both are divided into Section A which comprises 12 short questions from the core - 8 questions from Food Studies and 4 questions from Resource Management and Consumer Studies. Each question carries equal marks (6 marks). Candidates are required to answer 10 questions from this section. Section B comprises 5 questions, question 1 is compulsory (80 marks), candidates are required to select 2 of the other 4 questions, each carrying equal marks (50 marks). Section C is comprised of 3 elective questions and candidates select the elective they have studied in more depth. Electives 1 - Home Design and Management and Elective 3 - Social Studies carry equal marks (80 marks). Candidates who select to study Elective 2 - Textiles, Fashion and Design are assessed in the written paper (40 marks). The structure of the papers at Higher and Ordinary level facilitates mixed-level teaching.

2.2 Food Studies Practical Coursework

Food Studies Coursework is a mandatory component of the Leaving Certificate Syllabus in Home Economics – Scientific and Social. The specification for the coursework has been designed to support the rationale, aims and objectives of the syllabus. The thematic approach, on which the Food Studies Coursework is based, aims to encourage an integrated approach to teaching and learning within the syllabus. It is assessed at a Common level and has been developed at five different 'Areas of Practice' Area A – *Application of Nutritional Principles*, Area B – *Food Preparation and Processes*, Area C – *Food Technology*, Area D - *Properties of a Food*, Area E – *Comparative Analysis including Sensory Analysis*. Assessment comprises an account of four practical assignments in a pro-forma journal, each carrying equal marks (80 marks). A series of five assignments and a pro-forma booklet are issued annually by the State Examinations Commission to schools at the commencement of the Leaving Certificate Programme – 5th year. This is completed by all candidates studying Home Economics Scientific and Social, by early November of 6th Year and is submitted for assessment to the State Examinations Commission.

2.3 Textiles, Fashion and Design Coursework

The assessment of the practical component of Textiles, Fashion and Design elective is common for Higher and Ordinary levels. Candidates are required to produce a design folder for a garment or outfit, and to construct one garment that demonstrates the prescribed process or processes (40 marks). This coursework is completed by the end of April of the examination year and is examined in the candidates' school by an examiner appointed by the State Examinations Commission. Less than 0.5% of the total Home Economics Scientific & Social cohort present for this option.

Table 1: Marks allocated to each component of the Leaving Certificate *Home Economics – Scientific and Social* is as set out below:

Examination Component	Candidates selecting Home Design and Management / Social Studies Electives		Candidates selecting Textiles, Fashion and Design Elective	
	Marks	%	Marks	%
Written Examination	320	80	280	70
Food Studies Coursework	80	20	80	20
Textiles, Fashion & Design Coursework	-	-	40	10
Total	400	100	400	100

3. Analysis of Candidate Performance

3.1 Engagement with and performance

Statistical information on engagement with and performance on the various questions in the written and coursework components is presented below. Data on performance in *Textiles, Fashion and Design Coursework* is not captured centrally in a manner that allows for similar analysis.

The data in tables 2, 3 and 4 are based on an analysis of a random selection of scripts.

Higher Level

Table 2 is a summary based on an analysis of a random selection of 640 scripts (approximately 6.8% of all scripts).

Section	Question	Popularity (% attempts)	Rank order in popularity	Average mark out of question total (and as %)	Rank order in average mark	Topic
A		100%	N/A (all)	38.5 (64.2%)	N/A (all)	Food Studies, Resource Management and Consumer Studies
B	1	100%	N/A (all)	48.7 (60.9%)	N/A (all)	Food Studies, Consumer Studies
	2	49.7%	2	35.7 (71.4%)	1	Food Studies
	3	45.3%	3	26.8 (53.6%)	2	Food Studies
	4	30.5%	4	24.9 (49.8%)	4	Resource Management
	5	74.4%	1	26.4 (52.8%)	3	Social Studies
C	1	16.1%	2	52.9 (66.1%)	3	Home Design and Management
	2	0.6%	3	31.0 (77.5%)	1	Textiles, Fashion and Design
	3	83.3%	1	57.5 (71.9%)	2	Social Studies

Table 2: Popularity of each question and average mark for each question, *Home Economics - Scientific and Social* Higher level 2017.

All candidates attempted Section A, which is compulsory, and Question 1, Section B, which is also compulsory. Question B5 was the most popular optional question in Section B followed by Question B2, while Question B4 was the least popular. Question B2 gained the highest average mark 35.7 (71.4% of available mark), while Question B4 had the lowest average mark 24.9 (49.8% of available mark) for the optional questions in this section.

These figures show good course coverage of topics on the syllabus. Five candidates (0.78%) did not attempt the compulsory question from Section C.

Question C3 (Elective 3 – Social Studies) was the most popular choice of the three elective questions, being attempted by 83.3% of candidates and gained the second highest average mark 57.5 (71.9% of available mark). Just over 16% of candidates attempted Question C1 while Question C2 was attempted by less than 1% of candidates. The average mark is broadly similar for Elective Questions C1 and C3.

Ordinary Level

Table 3 is a summary based on an analysis of a random selection of 160 scripts (approximately 6.7% of all scripts).

Section	Question	Popularity (% attempts)	Rank order in popularity	Average mark (and as %)	Rank order in average mark	Topic
A		100%	N/A (all)	50.3 (83.8%)	N/A (all)	Food Studies, Resource Management and Consumer Studies
B	1	100%	N/A (all)	41.6 (52.0%)	N/A (all)	Food Studies, Consumer Studies
	2	82.5%	1	34.2 (68.4%)	2	Food Studies
	3	28.8%	3	37.8 (75.6%)	1	Food Studies
	4	23.1%	4	29.0 (58.0%)	4	Resource Management
	5	61.9%	2	29.1 (58.2%)	3	Social Studies
C	1	24.5%	2	46.4 (58.0%)	3	Home Design and Management
	2	0.6%	3	31.0 (77.5%)	1	Textiles, Fashion and Design
	3	74.8%	1	49.6 (62.0 %)	2	Social Studies

Table 3: Popularity of and average mark for each question, *Home Economics - Scientific and Social Ordinary level 2017*.

All candidates attempted Section A, which is compulsory, and Question 1, Section B, which is also compulsory. Candidates performed particularly well on Section A where they were required to answer 10 short questions. The standard of answering was very good and the average mark achieved was 50.3 marks (83.8% of available mark). Question B2 was the most popular question in this section, selected by 82.5% of candidates and the average mark achieved was 34.2 marks (68.4% of available mark), showing candidates had little difficulty in answering this question. Question 4 was the least popular question, being attempted by only 23.1% of candidates, the average mark was 29.0 marks (58.0% of available mark).

Five candidates (3.1%) did not attempt one of the compulsory elective question from Section C. Question C3 (Elective 3 – Social Studies) was the most popular of the three elective questions, being attempted by almost 75% of candidates and gained the highest average

mark 49.6(62% of available mark). Question C1 was attempted by 24.5% of candidates, with an average mark of 46.4 (58% of available mark).

Food Studies Coursework – the journal

The Food Studies Coursework is a mandatory component in leaving certificate Home Economics – Scientific and Social. The journal is a pro-forma journal completed in school, under teacher supervision in response to a specified brief, issued annually by the State Examinations Commission. It is marked at a Common level.

Table 4 is a summary based on an analysis of a random selection of 1,140 scripts (approximately 9.5% of all journals). The available mark for each assignment is 80 marks.

Assignment	Popularity (% attempts)	Rank order in popularity	Average mark (and as %)	Rank order in average mark	Topic
1	96.8%	2	64.9 (81.1%)	1	Application of Nutritional Principles
2	97.5%	1	61.6 (77.0%)	4	Application of Nutritional Principles
3	54.3%	4	61.9 (77.4%)	3	Food Preparation and Processes
4	92.7%	3	63.9 (79.9%)	2	Food Technology
5	54.1%	5	61.1 (76.4%)	5	Comparative Analysis including Sensory Analysis

Table 4: Popularity of and average mark for each assignment, *Food Studies Coursework 2017*.

The average mark for each assignment was 62.7 marks (78.4% of available mark). The small standard deviation of less than 3 marks indicates that the standard achieved was consistent across the assignments. Assignment 5, which is based in the area of practice – *Comparative Analysis including Sensory Analysis* was the least popular assignment, attempted by 54% of candidates. Assignments 1 and 2, based on *Applications of Nutritional Principles*, were the most popular, and were attempted by over 96% of candidates. In Assignment 1, the average mark was 64.9 marks out of a total of 80 marks, with candidates achieving the highest average mark of the Assignments in Assignment 1.

3.2 How well did the 2017 candidates achieve the objectives of the course and how do we know?

The Home Economics Syllabus identifies five specific categories of objectives, common to both levels.

The categories of key syllabus objectives are as follows:

(i) Knowledge (ii) Understanding (iii) Skills (iv) Competence and (v) Attitudes.

The success of candidates in meeting each of the syllabus objectives is considered by means of an analysis of the standard of candidate responses to specific parts of questions on both the examination paper and on the practical coursework. Candidates' engagement with, and attainment of the key objectives, were considered in terms of their responses to items on (i) written paper - Higher level and Ordinary level; and on (ii) Practical Coursework - Food Studies and Textiles, Fashion and Design, both of which are examined at a Common level. Such analysis is made possible by information captured by examiners during their work. Questions that serve as discriminators of achievement in the higher order cognitive skills were included in the three sections of the written paper.

The following commentary should be considered in conjunction with the syllabus, examination papers and the published marking scheme.

Knowledge and Understanding

Most candidates demonstrated good levels of achievement when asked to recall basic facts, principles, terminology, methods and concepts. At both levels, this knowledge is fundamental to the success of candidates in the examination. In Section A – short response questions, Higher level candidates are required to give greater attention to detail and accuracy to achieve full marks.

At Higher level, some questions require recognition of previously learned facts and specific terminology. To gain full marks and to illustrate a complete understanding of the question, additional information or information supported by an example is required. In Section A, Question 7, for example, in addition to *explaining the process of fermentation*, candidates were required to *name two by-products of fermentation* to show a full understanding of the process of *fermentation*. These questions assess understanding of concepts, are more demanding, and necessitate greater detail for full marks and many candidates responded well.

Question A.6, required candidates to recall factual information and terminology, *name and describe two common food poisoning bacteria using the headings – description / characteristic and habitat*. In general candidates responded well to this question, they were able to name *two food poisoning bacteria*, but had difficulty in explaining *habitat*, confusing habitat with food source.

Many questions require the candidates to demonstrate higher order skills and to show a broad and deep understanding of scientific principles and concepts. Question A.2 - *describe the effect of gelatinisation on starch* - was answered well by many higher level candidates.

At Ordinary level, to encourage engagement with the topics and to assess knowledge in the short response questions, Section A includes a number of completion, tick-box questions that almost all Ordinary level candidates could reasonably be expected to engage with, with a good level of success. There are also some more discriminating questions. In this section, when Ordinary level candidates are presented with true / false questions or are given words to complete sentences, many gain high marks.

The majority of candidates gave good answers to nutrition knowledge questions. In Question A.3 - *which of the protein foods listed below are of high biological value and which are of low biological value* - most candidates correctly identified each type of food. In Question A.5 - *outline three healthy eating guidelines for pregnant women* - many candidates displayed a clear understanding of the requirements for a healthy diet. Some candidates outlined general healthy eating guidelines which were not specific for pregnant women and such answers could not gain full marks.

The same level of knowledge was not evident when Ordinary level candidates were asked to combine knowledge of facts with understanding and interpretation of terminology. For example, in Question A. 9 candidates were asked *to state three ways the Sale of Goods and Supply of Services Act (1980) protects the consumer*, and many found it difficult to state the required three points.

At Higher level, attention to detail and accuracy in recall of facts, principles, terminology, methods and concepts is required. In addition, the ability to apply this knowledge and understanding is necessary in order to attain full marks in both Section B and Section C. In Section B Question B1(b), candidates were required to *classify carbohydrates, with reference to each class give: the chemical formula, examples, food source*. Many Higher level candidates gave good factual answers supported by an example in order to illustrate a complete understanding of the question. In Question B2(b), candidates were required to *describe the stages of production of cheese*, however, a number of candidates neglected to include the two essential points required in cheese production - addition of a *culture of lactic acid bacteria* and *rennet*, and thus could not achieve full marks. This type of question increases the higher order cognitive skills required and serves as a discriminator of achievement at Higher level.

At Higher level, candidates' understanding of the relationship between nutritional needs and the health of the individual was tested in Question B1(d). Candidates were required to illustrate that they had developed an awareness of the *effects of high sugar consumption on the body*. Candidates citing effects such as type 2 diabetes, obesity, heart disease and nutritional deficiency scored well.

At Ordinary level, an awareness of the importance of a healthy diet was also tested. In Question B1(a), candidates were asked to discuss the *reason why women consume more fruit and vegetables than men in each of the three different age groups* in the chart provided. In addition, candidates were required to *suggest three ways that men can increase their daily intake of fruit and vegetables*. This question was well answered by most candidates. Most answers were clear and concise, and showed that candidates had a comprehensive understanding of nutrition.

Ordinary level candidates also displayed a good knowledge of *the nutritive value and the dietetic value of meat* in Question B3(a). However, some candidates lacked the theoretical understanding to give the detail required in the answer to obtain full marks e.g. nutrients were listed with no detail of type i.e. HBV protein, and vitamins and minerals were generally not named.

In Elective 1, Home Design and Management, Section C.1(a), many Higher level candidates showed an excellent knowledge of the elements and principles of good design and many were able to demonstrate higher order skills in their response. Candidates were required to *evaluate the suitability of the home for the family's present and future needs* using the information provided in the house plan in Q.C.1(a)(i). Most candidates were able to suggest a modification however, some candidate were unable to justify their suggestions and thus could not achieve high marks.

In Question C.1(c)(ii), candidates were required to *explain the underlying principle of **one** natural and **one** artificial method of ventilation*. Few Higher level candidates provided enough detail in their answers to show a full understanding of the principles and thus could not be awarded full marks.

At Higher level, Elective 3, Social Studies Question 3(a)(i) and (ii), tested candidates' understanding of social change on individuals, families and society. Candidates were asked to *comment on the information provided and analyse why unemployment rates have changed in Ireland* and to *discuss the effects of unemployment on individuals, families and society*. This question was considered topical and relevant to many people's lives. The quality of answering varied, some candidate's performed well and engaged in a full discussion and analysis of the issues involved, demonstrating good higher order skills, while others identified points only and full marks could not be awarded.

At Ordinary level, in Elective 3 - Social Studies - Question C.3(a)(ii), candidates were asked to *name **three** groups of people at risk of poverty **and** state the effect of poverty on **each** group*. The more successful candidates demonstrated the ability to apply knowledge gained inside and outside the classroom. When candidates fail to put thought into what is asked, it is evident in the answer as responses are often uncritical. In Elective Question C 3(b)(ii), candidates were asked to *explain the benefits of voluntary work to the individual and the community*. This question was generally well answered, and many candidates showed the ability to apply social concepts and to link the effects of poverty on each group.

Questions which assess understanding can often cause significant difficulty for Ordinary level candidates. In Question B2 (a)(ii), candidates were asked to identify *possible diet related problems that may arise if Paul and Lisa continue eating the morning break, lunch and dinner meals*. Many candidates listed the problems, but were unable to apply their knowledge to the foods in the given menus.

Questions which required a deeper understanding of the concepts and a demonstration of higher cognitive skills were less well answered by Ordinary level candidates. In Question C.3(a)(i), candidates were asked to *define poverty and explain **each** of the following – relative poverty and absolute poverty*. This question was, in general, less well answered as evidenced by answers that lacked accuracy and detail. Such responses could not command high marks.

Candidates at both levels were required to appraise information given in chart form in the compulsory question B.1(a), *BMI of the Irish population (by age group)* (Higher level) and *number of people eating 5 or more portions of fruit and vegetables daily* (Ordinary level). Higher level candidates who were practiced in answering this type of question when preparing for the examination, generally analysed and interpreted the data correctly and thus achieved high marks. In general, many Ordinary level candidates found analysing questions a challenge. They also had difficulty in giving the correct number of points to show a full understanding of the topic.

The economic dimensions of Home Economics were clearly understood by Higher level candidates, In Question B.1 (e), candidate were asked to *outline five strategies to be considered when purchasing pre-prepared food in order to reduce sugar consumption* and in Ordinary level Question B.4(a), candidates were asked to discuss the *factors that should be considered when selecting a refrigerator for a family*. Candidates who discussed a link between price and quality were awarded high marks. In the Food Studies Coursework Assignment 4 which is practically based, candidates had little difficulty when evaluating *the cost of homemade ice-cream in comparison to a similar commercial ice cream*, showing good linking of syllabus material.

The knowledge of facts, principles and terminology as well as the ability to research and analyse information are required by candidates in the Food Studies Coursework. In Area of Practice C – Food Technology, candidates are required to study simple food-processing procedures that can be carried out in the home and also in a commercial setting. In Assignment 4 - candidate were asked to *Investigate two methods of making ice cream (in the home) and explain the underlying principle in each case*. Many candidates showed excellent skills in research methodologies. It is important to note that marks are lost when candidates do not show evidence of a thorough exploration and a comprehensive analysis of all the issues and factors directly relevant to the key requirements of the assignment.

In all Areas of Practice in Food Studies Coursework, candidates are required to demonstrate a broad knowledge and a deep comprehension of the key requirements as laid out in each assignment. Area of Practice A – Assignment 1, candidate were asked to show *dietary / nutritional needs; meal planning guidelines with specific reference to children between 2 and 5 years; modifications to dishes to ensure they are suitable for young children*. Most Higher level candidates demonstrated well-structured answers with reasonably high levels of understanding and achievement. Many Ordinary level candidates found analysing and categorising research difficult; this often resulted in direct transcription and candidates lost marks as a consequence. A high percentage of candidates responded well to Area of Practice A, as a knowledge of the nutritional principles studied for the written paper can be applied to practical coursework to demonstrate a greater understanding.

The assessment objectives for the Textiles, Fashion and Design Coursework, which has common assessment criteria, allows candidates to further develop knowledge, understanding and skills in relation to the application of design principles, aesthetic considerations and creativity. In the assignment brief for the coursework, candidates were asked to *design and sketch an outfit suitable for wearing to a musical event of your choice*. Candidates responded well, with some excellent explorations of the theme.

Skills

The syllabus indicates that understanding includes the capacity to solve problems and engage in various forms of higher order thinking, particularly in combination with the objectives specified under skills and competence. Higher level candidates were more able than Ordinary level candidates to apply what they had learned and they analysed information and scenarios more precisely. Both the written paper and the coursework tests the skills ability of candidates. Several questions test candidates' ability to analyse, synthesise and interpret material.

At Higher level, Section C – Social Studies elective Question C.1(a)(i), a statistical data chart was provided and candidates were asked to *comment on the information provided and analyse why unemployment rates have changed in Ireland*. Higher level candidates demonstrated a high level of attainment in their ability to analyse, synthesise and interpret material.

At Ordinary level, Question C.1.(a), candidates were asked to *discuss four factors that may influence a young couple's choice of housing style*. Some candidates did not understand the term 'housing style' despite the provision of graphics on the examination paper showing three different housing styles. Many candidates misinterpreted the question and identified points that related to choosing housing in general and not to housing style, as specified in the question. Responses by many Ordinary level candidates lack the required detail to attain high marks.

At Higher level Question C.2(a)(i) - Textiles, Fashion and Design elective, many candidates showed excellent discrimination in their understanding and appreciation of the quality and suitability of clothes and fabrics when asked to *comment on the outfit in the picture above (athleisure), referring to comfort, aesthetic appeal and current fashion trends*.

In Food Studies Coursework the skills required to research, analyse, and interpret material as a basis for planning and evaluating alternatives, and making judgements and decisions are essential. Problem solving skills are key requirements of each assignment. Investigations which were direct transcription, were particularly evident in Area of Practice C - *Food Technology*. Candidates were asked to research **two** types of commercially prepared ice-cream (one economy and one luxury/premium) and to investigate **two** different methods of making ice cream (in the home). Some candidates made little or no attempt to analyse the information, and lost marks, or at most attained a maximum of half marks.

In a small number of centres it was noted that the work presented, particularly in Area of Practice A – *Application of Nutritional Principles* showed levels of similarity that could suggest that the research may have been undertaken collectively and not by the individual candidate, as is required by the coursework regulations.

The Food Studies Coursework directly assesses skills, and candidates who develop and extend organisational, manipulative and creative skills in relation to the preparation, cooking and presentation of food and report it, in an accurate and comprehensive way on *all the essential stages*, are rewarded with high marks. Key factors must relate to the specific dish / test, and a clear explanation of the importance considered which is critical to the success of the dish explained. Candidates were not awarded high marks when they identified the key

factor but then failed to explain its relevance and / or when the key factor identified was not critical to the success of the dish.

Many candidates showed excellent analytic and evaluative skills and were rewarded with high marks for their ability to analyse the effectiveness of a course of action and to redirect if necessary, as each assignment is evaluated in terms of (a) *implementation* and (b) *specific requirements*. A minority of candidates showed limited skills in analysis, many could reach a decision but were unable to satisfactorily justify that decision. Contradictory statements made on descriptive points on the sensory aspect of the dish gain no marks.

Higher and Ordinary Level questions on the written papers afforded the opportunity to assess candidates' knowledge and skills in testing recall in relation to syllabus topics which can be examined through the practical Food Studies coursework. This enables candidates to transfer the knowledge and experience gained at practical work and to apply it to questions on the written paper. This was evidenced by the high marks awarded in Question B.3(b)(i), at Ordinary level where candidates were asked to *outline the effects of cooking on meat*, (ii) *the guidelines for storing meat*. and at Higher level Question B3(b), candidates were asked to *outline **four** conditions required for sensory analysis testing* and (c) *write a detailed account of **one** difference test used in the food industry*.

Creativity and the ability to respond to design through the exploration of materials and processes were demonstrated from a very good to excellent standard in relation to the sewing and handling of fabrics in the Textiles, Fashion and Design practical assignment brief. Many candidates related very well to the theme '*musical event*', explorations were very good and there was excellent understanding of the requirements and constraints of the design brief, *outfit selected can be knitted, crocheted or machine stitched and must include **two** of the mandatory processes outlined – a pocket / appliqué or decorative stitching / darts or shaping*. All finished outfits had the required mandatory processes included.

Competence

The written examination assesses the levels of candidate competence in several parts of questions. The ability to present information in a variety of forms and in a structured and logical way is required when answering many questions. Answers need to be factually accurate, concepts clearly explained and qualified with examples where necessary. The assessment of such competencies allows for a significant degree of differentiation in the marking between candidates of high, moderate and low levels of achievement in the subject.

The coursework provides candidates with the opportunity to present research and analysis in a structured and logical way. When completing the investigation in each area of practice in Food Studies Coursework, a high percentage of candidates demonstrated their competence to research and analyse a problem. Many candidates showed evidence of a thorough exploration and comprehensive analysis of all the issues and factors directly relevant to the key requirements of the assignment, and as a result were awarded Band A, 19 - 24 marks for their research.

In the Area of Practice A – Application of Nutritional principles – the *dietary / nutritional needs* with examples of suitable foods *and meal planning guidelines* had to be researched and analysed with specific reference to *children between two and five years*, and

modifications made to ensure dishes are suitable for young children. As evidenced in the results, the standard of work presented was consistently very good to excellent.

In the practical Food Studies Coursework the majority of candidates demonstrated the competence to plan, prepare and present meals to the specific requirements of each assignment in each area of practice. In Area of Practice B – Food Preparation and Cooking Processes, candidates were required to *prepare, cook and serve* one dish from their research *that required special adherence to safe food practices.* Most candidates identified all essential stages in the preparation of the dish, and were summarised and presented in the candidates' own words, in the correct sequence, with due reference to the relevant food preparation processes used. Candidates who lost marks identified only some, few or none of the essential stages in the making of the dish.

Candidates who submit Textiles, Fashion and Design coursework for examination are able to show clearly the competence to produce a garment to a high standard, with a clearly identifiable interpretation of the theme as specified. The assignment brief required candidates to *design and sketch an outfit suitable for wearing to a musical event of your choice.* Candidates initiated and implemented independent work schedules that demonstrated the use of a range of prescribed mandatory processes to include *a pocket, appliqué or decorative stitching, darts or shaping* and such competent work was awarded high marks.

In Food Studies Coursework, candidates are becoming increasingly competent when making and evaluating decisions based on the consideration of all available information. Many candidates draw informed conclusions from what was learned in the analysis when arriving at conclusions for evaluation. This was evident when candidates selected a dish appropriate for Assignment 2 Area of Practice A – *main course dishes suitable for women and children who wish to increase the iron intake in their diet.* Many candidates selected an appropriate dish based on their research and most candidates evaluated the suitability of the dish. This reflects good classroom practice and is a positive development.

The interpretation of a chart in Higher level Question B.1(a), showed the candidates competence to make and evaluate decisions based on the consideration of the information available on *Body Mass Index (BMI) of the Irish population (by age group)* ranging from poor diet and lifestyle to age and health related issues. A minority of candidates transcribed information from the bar chart only, illustrating that while they were able to correctly recognise and interpret data they did not have the relevant skills / knowledge to make and evaluate decisions based on the considerations of all the relevant information available. The levels of competence required to make and evaluate decisions based on the consideration of all available information in Ordinary level is not always presented in a logical and structured manner by candidates. Candidates are rewarded once for correct information, and information that is repeated will not be credited with any further marks.

Ordinary level candidates often only state one valid point when perhaps three or four points are required to obtain maximum marks. While question cues such as *'list', 'name', 'state'* do not present a difficulty, *'outline', 'explain', 'discuss'* are frequently not adequately addressed. Overall performance could be improved if due cognisance is taken of question cue words and attention is given, by candidates, to the allocation of marks for each part of the

question. Brevity of responses and lack of development of points of information prevented many Ordinary level candidates from obtaining high marks.

Attitudes

At Higher level, candidates' showed a knowledge and awareness of the role of the consumer in society and of the importance of discerning consumers, they were able to research and evaluate information as a basis for making judgements and choices. This was evident from the fact that most candidates presented concise accurate answers in Question B.1(e), where candidates were asked to *outline **five** strategies to be considered when purchasing **and** preparing food in order to reduce sugar consumption* and in Question B.4(b), where candidates were asked to *outline the conditions that are required in order to qualify for mortgage approval*.

Many Ordinary level candidates could not obtain full marks in Question B.1(d), where they were asked to *discuss **four** factors to be considered by consumers when selecting **and** buying pre-prepared (convenience) fruit and vegetables* as they could only identify one or two factors.

At Higher level, Question B.2(c), asked candidates to discuss *the role of artisan producers / small businesses in the Irish food industry*. This question tested the candidates' understanding of the value of individuality, creativity and enterprise. Many candidates showed a clear appreciation of these attributes and most candidates gave examples of artisan foods and understood that they were handmade or made using traditional methods of production. However, some answers were perfunctory and did not identify or elaborate on the points made, which was required to obtain high marks.

At Higher level, candidates in Section C, Elective Question C.3(a)(ii), were asked to *discuss the effects of unemployment on individuals, families and society*, and Elective Question C.1(a)(ii) required candidates to *identify potential inefficiencies in the home and suggest strategies for improvement*. Many candidates demonstrated an awareness of the responsibilities people have towards themselves and their families, peers and other members of society. Many of these candidates identified a number of points and discussed each point in detail, and thus obtained high marks.

Candidates' awareness of the importance of discerning consumers was evident across the Food Studies Coursework assignments. Candidates costed the dishes / main courses / products in all Areas of Practice. This highlights candidates' awareness of food costs, and many candidates made a complete cost analysis of the product (ice-cream) and compared these costs to those of a commercial product in Assignment 4.

In all the Food Studies Coursework assignments, candidate showed an understanding of the importance of safe and hygienic practices in the home and elsewhere and the fact that safety awareness is an integral part of life in the use of food, materials and equipment. Marks were lost when hygiene and safety practices were identified only but were not related to the specific ingredients being used or dish being cooked. Generic points such as 'wash hands' only gain half marks.

Most candidates engaged fully with food safety practices and were awarded high marks in Food Studies Coursework Area of Practice B: Food Preparation and Cooking Processes where

research was carried out on *the importance of food safety for consumers, common food safety hazards, practices to ensure that food is safe to eat and dishes that require special adherence to safe food practices*. Candidates showed appreciation of the importance of safe and hygienic practices in the home. The importance of the application of coursework learning to the written paper is evidenced in Ordinary level Question B.3(b)(ii), where candidates were asked for *the guidelines for storage of meat*- and these were clearly identified by many candidates. At Higher level, Question A.3, candidate were asked to explain *the role of the Food safety Authority of Ireland (FSAI)*, and many clearly understood and explained its role.

In Textiles, Fashion and Design coursework the appreciation of individuality and creativity is provided for through candidates use of a of a wide variety of fabrics in different colours and textures e.g. cotton, denim, linen, lace, chintz, raw silk, and the selection of a range of different designs, adding to the overall finish of the garments. Candidates related well to the theme *'musical event of your choice'* and some explorations were excellent, showing careful analysis and good use of research methods to develop individual ideas around the theme.

4. What can current and future students and their teachers learn from this?

The following advice is offered to teachers and students preparing for the Leaving Certificate Home Economics Scientific and Social written and coursework examinations. The comments below refer to **both** levels unless otherwise specified and reflect good practice that should be developed over the course of the student's five or six years of study in this subject area at second level. The depth of understanding and level of mastery required of candidates at Ordinary level is obviously less than that expected at Higher level.

4.1 During the Learning

- Teachers and students are encouraged to engage fully with all parts of the syllabus, the omission of any part of the course severely limits students' ability to achieve a satisfactory grade as it restricts their choice of questions. Questions range across the entire syllabus and candidates who study the entire course content are rewarded in the examination.
- Students should develop the competency of planning and structuring responses, and an awareness of the detail required in questions to attain high marks. Key points to be addressed should be noted and answers formulated around the key points identified.
- In discussion type questions, it is good practice to structure responses with examples to support explanations.
- Have regard to mark allocation; a twenty-mark allocation generally requires answers to have four / five distinct points with no overlap evident.
- Teachers and students are encouraged to engage in a wide variety of teaching and learning methodologies, the ability to analyse and interpret information is essential to

answer Question B.1.(a). Students should be familiar with the practice of interpreting case studies, charts and tables of information.

- The linking of syllabus material is essential, students should learn how to integrate topics from one content area to another.
- Areas of the syllabus can be examined in different ways and teachers and students should be prepared for different styles of questions.
- Students should be familiar with the name and question number of the elective they are studying on the examination paper, as each year candidates attempt the incorrect elective or parts of different elective questions and lose substantial marks as a consequence.
- Close to the examination time the use of previous examination papers and marking schemes will assist students in familiarising themselves with the paper format, question styles, terms, weighting of marks and answer guidelines used to assess knowledge and understanding of topics. However, teachers and students are reminded, as noted in the introduction to the SEC marking schemes that in many cases only key phrases are given which contain information and ideas that must appear in the candidate's answer in order to merit the assigned marks. Teachers and students should note that the descriptions, methods and definitions in the marking scheme are not exhaustive and alternative valid answers are acceptable, and that the detail required in any answer is determined by the context and the manner in which the question is asked. Requirements and mark allocations may, therefore, vary from year to year. However, the notes to teachers and students at the front of the published marking scheme about their use should be carefully taken into consideration.
- Teachers should encourage the use of diagrams and charts to support answers, these can help students avoid writing long descriptive answers and therefore save valuable time e.g. in Section C, Elective 1.(c)(ii) *explaining the principle of **one** method of natural and **one** method of artificial ventilation* and in Section B Question 1.(b), *classification, chemical formula, examples, food source of carbohydrates*.
- Students should be encouraged to develop strategies for cross-checking answers with the examination paper.

4.2 While doing the practical coursework

Food Studies Coursework

- Students should read and interpret assignments carefully and should be directed to continually refer to the recording criteria in the journal in order to ensure the key requirements of the assignment are included.
- Students should research topics independently, using as wide a range of resources as possible and research should be analysed and linked to the assignment topic.
- Course content relevant to journal work should be studied in advance of commencing assignments, students require a foundation in nutrition to investigate the

requirements of special diets in Area of Practice A – Application of Nutritional Principles.

- In practical classes students should be encouraged to identify the *key factors* that are critical to the success of the dish, and the important *hygiene and safety factors* and know the importance of citing reasons in respect of both.
- Students should critically analyse outcomes in their evaluations. Students are advised to complete the evaluation for each assignment as close as possible to the completion of the practical application.
- Following the practical application, record each assignment in its entirety before starting the next one, so as to avoid errors and omissions.
- In assignments where common research resources are used or where students work in pairs for practical work, each student must present his / her individual report of the assignment.
- It is particularly important to use black or blue pen in Food Studies Coursework, pencil should not be used as it may fade and make reading difficult.
- Students must not insert extra material or sub divide lines, examiners will only mark what is presented on the pages of the journal itself, additional material will not be awarded any marks.

Textiles, Fashion & Design Coursework

- The finished garment and accompanying design folder should be the student's own individual work.
- Students should follow the assessment criteria outlined in page 4 'Practical Coursework Assignment Brief'.
- Fabric selected should be suitable for the brief, easy to handle and skill appropriate.
- During the construction, students should ensure that mandatory processes are correctly executed.

4.3 During the written examination

- Students should allocate time at the start of the examination to read the instructions at the beginning of each section, noting the compulsory questions and the elective they have studied, and should highlight or underline key parts of each question.
- Students should attempt all parts of the required number of questions, if questions / parts are omitted, this reflects adversely on final grades. This is a common error at Ordinary level.
- It is advisable to answer compulsory questions first, followed by optional questions, and students should ensure they answer the required number of questions and all parts of questions, even when they have limited knowledge of the topic.

- Students should be mindful of the mark allocation for different parts of questions and present the required number of points to be eligible for the award of full marks.
- Students should plan in advance their use of time during the examination and this should allow for revision of their work.
- Students should pay particular attention to the wording used in the question, particularly when the following cues are used – ‘discuss’, ‘analyse’, ‘elaborate’, ‘give an account’. Incomplete answers and answers that do not include adequate discussion, elaboration or explanation are the main reasons why students lose marks.
- It is important that students ensure they understand the question before starting to answer it. It is noted that students sometimes attempt the first part of a question and find they are unable to attempt any additional part, resulting in the student having to attempt an additional question.
- Students should avoid lengthy descriptive paragraphs, while being mindful of giving an expanded answer in the form of a sentence or sentences when required. This is particularly important when answering the social studies elective as it prevents candidates from giving irrelevant information.
- Students should begin each question on a new page, and number each part of the question in sequence, this avoids omitting sections of questions and affords the student the opportunity to add additional information at the end of the examination.
- Students attempting extra questions in the examination are reminded that, while all answers will be marked, they might have been better served spending more time reviewing and clarifying their answers rather than attempting extra questions.
- Students should use all of the time in the examination. If they finish the examination early, they should review their work, checking back through answers.

Note of thanks

The SEC acknowledges and thanks Home Economics teachers and school authorities for their assistance in ensuring the integrity of the Food Studies coursework and the Textiles, Fashion and Design coursework submitted for examination.

Appendix: Statistics and Trends

Participation Trends

Table 1 gives the overall participation rates of candidates in Leaving Certificate *Home Economics - Scientific and Social* for the last five years, 2013 -2017.

The Leaving Certificate Home Economics candidature as a percentage of the Leaving Certificate candidature is shown in Table 1. The figures show that the number of candidates taking Home Economics Scientific and Social has declined by 1.6% between 2013 and 2017. However, an increase of 0.3% is evident in 2017. Fluctuations in the size of the cohort can occur from year to year.

Year	Home Economics S&S candidature	Total Leaving Certificate candidature*	Home Economics S&S as % of total
2013	12046	52772	22.8%
2014	12027	54025	22.3%
2015	11897	55047	21.6%
2016	11642	55707	20.9%
2017	11814	55770	21.2%

*Total Leaving Certificate candidature excludes Leaving Certificate Applied candidates.

Table 1: Participation in Leaving Certificate *Home Economics - Scientific and Social*, 2013-2017.

The number and percentage of candidates taking each level - Higher Level and Ordinary Level - over the last five years, 2013-2017 is given in **Table 2**.

Year	Total Home Economics S&S candidature	Number at Ordinary Level	Number at Higher Level	% Ordinary Level	% Higher Level
2013	12046	3146	8900	26.1%	73.9%
2014	12027	3466	8561	28.8%	71.2%
2015	11897	3143	8754	26.4%	73.6%
2016	11642	2887	8755	24.8%	75.2%
2017	11814	2400	9414	20.3%	79.7%

Table 2: Number and percentage of candidates at Higher and Ordinary level, 2013 to 2017.

Table 2 shows that from 2013 – 2017, the Higher level cohort increased from 73.9% to 79.7%, an increase of 5.8%. Over the same period of time, the Ordinary level cohort fell from 26.1% to 20.3%, a decrease of 5.8%.

The number and percentage of candidates by gender taking each level - Higher Level and Ordinary Level - over the last five years is given in **Table 3** and **Table 4** respectively.

Year	Total Higher level	Female Candidates	Male Candidates	Female as % of total	Male as % of total
2013	8900	8179	721	91.9%	8.1%
2014	8561	7954	607	92.9%	7.1%
2015	8754	8095	659	92.5%	7.5%
2016	8755	8068	687	92.2%	7.8%
2017	9414	8552	862	90.8%	9.2%

Table 3: Gender composition of Higher level cohort, 2013 to 2017.

Year	Total Ordinary level	Female Candidates	Male Candidates	Female as % of total	Male as % of total
2013	3146	2458	688	78.1%	21.9%
2014	3466	2717	749	78.4%	21.6%
2015	3143	2476	667	78.8%	21.2%
2016	2887	2258	629	78.2%	21.8%
2017	2400	1843	557	76.8%	23.2%

Table 4: Gender composition of Ordinary level cohort, 2013 to 2017.

Tables 3 and 4 indicate that between 2013 and 2017 the gender breakdown has been relatively stable, with the cohort being predominantly female. However, an overall increase of 1.4% males taking the examination is evident in 2017.

2. Overall performance of candidates

The grading scale for Leaving Certificate examinations changed in 2018. Direct comparison with all aspects of the grade distributions from previous years is not possible. Nevertheless, data from 2016 and 2015 are presented in as comparable a way as is possible. The column widths in tables 6 to 11 below reflect the widths of the corresponding grade bands, so that the boundaries between these columns are aligned according to the corresponding grade boundaries. For example, the layout reflects the fact that grade 6 in 2017 is directly comparable with grades D2 and D3 combined in 2016 and 2015, but grade 7 in 2017 is not directly comparable to any grade band(s) from 2016 and 2015. The distribution of grades awarded in Higher level is given in **Table 5, 6, and 7**.

2.1 Higher Level Statistics

Year	Total	1	2	3	4	5	6	7	8	
2017	9414	3.1	16.3	24.2	23.8	18.4	10.4	3.0	0.8	
		A1	A2 + B1	B2 + B3	C1 + C2	C3 + D1	D2 + D3	E	F	NG
2016	8755	2.0	16.4	28.5	25.6	17.9	8.1	1.5	0.1	0.0
2015	8754	2.4	16.1	26.3	25.6	17.9	9.8	1.8	0.1	0.0

Table 5 Percentage of candidates awarded each grade in *Home Economics - Scientific & Social*, 2017, with comparative data from 2016 and 2015.

Results for 2017 in Grades 1, 2, 3, 4 and 5 are broadly comparable to previous years. A slight increase in grades 6, 7 and 8 is evident in 2017.

The distribution of grades awarded by gender is given in **Table 6** (female candidates) and **Table 7** (male candidates).

Year	Total	1	2	3	4	5	6	7	8
2017	8550	3.3	17.2	25.0	23.8	17.8	9.6	2.7	0.6

		A1	A2 + B1	B2 + B3	C1 + C2	C3 + D1	D2 + D3	E	F	NG
2016	8068	2.1	17.4	29.4	25.3	17.0	7.4	1.3	0.1	0.0
2015	8095	2.5	16.8	27.2	25.7	17.0	9.1	1.6	0.1	0.0

Table 6 Percentage of female candidates awarded each grade in *Home Economics - Scientific & Social* at Higher level, 2017, with comparative data from 2016 and 2015.

Year	Total	1	2	3	4	5	6	7	8
2017	864	1.3	7.5	15.8	23.1	24.0	18.9	6.5	2.9

		A1	A2 + B1	B2 + B3	C1 + C2	C3 + D1	D2 + D3	E	F	NG
2016	687	0.1	4.9	18.3	28.7	27.8	15.7	4.1	0.3	0.0
2015	659	1.4	7.6	15.2	23.6	28.9	18.1	4.9	0.5	0.0

Table 7 Percentage of male candidates awarded each grade in *Home Economics - Scientific & Social* at Higher level, 2017, with comparative data from 2016 and 2015.

The results given in the Tables 6 and 7 above shown that, at Higher level, female candidates consistently outperformed male candidates at all points in the grade distribution for each of the last three years. For example, at Higher Level in 2017, 20.5% of female candidates achieved a grade 1 or 2 compared to 8.8% of male candidates achieving a grade 1 or 2.

2.2 Ordinary Level Statistics

The distribution of grades awarded in Ordinary level is given in **Table 8, 9 and 10**.

Year	Total	1	2	3	4	5	6	7	8	
2017	2400	0.2	6.2	20.8	28.1	22.3	14.1	5.3	3.1	
		A1	A2 + B1	B2 + B3	C1 + C2	C3 + D1	D2 + D3	E	F	NG
2016	2887	0.4	7.1	22.8	29.2	20.4	13.2	5.3	1.6	0.0
2015	3143	0.2	6.3	21.2	29.8	23.1	12.3	5.3	1.4	0.2

Table 8 Percentage of candidates awarded each grade in *Home Economics – Scientific & Social* at Ordinary level, 2017, with comparative data from 2016 and 2015

Results for 2017 are broadly comparable to previous years.

The distribution of grades by gender over the last three years is given in **Table 9** (female candidates) and **Table 10** (male candidates).

Year	Total	1	2	3	4	5	6	7	8	
2017	1843	0.2	7.2	22.5	29.0	21.9	12.3	4.4	2.4	
		A1	A2 + B1	B2 + B3	C1 + C2	C3 + D1	D2 + D3	E	F	NG
2016	2258	0.5	8.0	25.2	29.8	19.0	11.8	4.6	1.2	0.0
2015	2476	0.3	7.2	23.0	30.8	22.4	11.1	5.0	0.8	0.2

Table 9 Percentage of female candidates awarded each grade in *Home Economics – Scientific & Social* at Ordinary level, 2017, with comparative data from 2016 and 2015.

Year	Total	1	2	3	4	5	6	7	8
2017	557	0.0	2.9	14.9	25.1	23.3	20.3	8.3	5.2

		A1	A2 + B1	B2 + B3	C1 + C2	C3 + D1	D2 + D3	E	F	NG
2016	629	0.2	4.2	14.3	26.7	25.6	17.9	7.8	3.3	0.0
2015	667	0.0	3.4	14.5	26.4	25.6	16.8	9.7	3.3	0.1

Table 10 Percentage of male candidates awarded each grade in *Home Economics – Scientific & Social* at Ordinary level, 2017, with comparative data from 2016 and 2015.

The results given in the tables above show that at both Higher level and Ordinary level, female candidates consistently outperformed male candidates at all points in the grade distribution for each of the last three years. The results in Tables 9 and 10 above show that at Ordinary level in 2017, 7.4% of female candidates achieved a grade 1 or 2 compared to 2.9% of male candidates achieving the same grades.

