



Coimisiún na Scrúduithe Stáit
State Examinations Commission

LEAVING CERTIFICATE 2012

AGRICULTURAL ECONOMICS

ORDINARY LEVEL CHIEF EXAMINER'S REPORT

HIGHER LEVEL CHIEF EXAMINER'S REPORT

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AGRICULTURAL ECONOMICS

1. General Introduction

1.1 The Syllabus

The Agricultural Economics syllabus dates from 1969 and it was examined for the first time in 1971. There has been no change in the syllabus or in the nature and format of the examination since its introduction in 1969.

This report should be read in conjunction with the examination papers and marking schemes, which are available on the State Examinations Commission website www.examinations.ie.

1.2 Format of Examination

The examination has two components at both the Higher and Ordinary Level as follows:

- (i) Final Written examination paper (80 %)
- (ii) School Assessed Project / Practical Coursework (20 %)

Candidates, at both levels, sit a final written examination of 2.5 hours duration. The written examination is assessed out of 320 marks by examiners who are appointed and trained annually by the State Examinations Commission. The written examinations comprise of two parts as follows:

Part 1: 120 marks

Candidates are required to attempt 15 of the 20 short-response type questions. All questions have an equal weighting of 8 marks.

Part 2: 200 marks

Candidates are required to attempt 4 of 6 constructed-response type questions. All questions have an equal weighting of 50 marks.

The practical coursework, which is offered at a common level, is carried out by candidates over the duration of the course of study. This coursework involves a school based assessment using a common level marking scheme. Monitors, appointed annually by the State Examinations Commission, monitor the project coursework carried out in schools. A maximum of 80 marks may be awarded to the candidate for this component. General themes for the practical coursework for the subject are outlined in *Rules and Programme for Secondary Schools*.

1.3 Candidature

The number of candidates taking Agricultural Economics reached a peak of 357 candidates in 1987. Thereafter, the numbers declined and this decline has accelerated since 2001, reaching an all-time low of 30 candidates in 2010. However, the numbers increased to 85 candidates in 2012. 84 candidates sat the examination at Higher Level and one candidate at Ordinary Level.

The following table shows the numbers of candidates taking Agricultural Economics at Ordinary Level and at Higher Level since the last publication of a Chief Examiner’s Report.

Numbers taking Agricultural Economics Higher and Ordinary Level 2008 – 2012

Year	Higher Level	Ordinary Level	Total
2008	71	1	72
2009	64	3	67
2010	30	0	30
2011	32	2	34
2012	84	1	85

Table 1: Numbers taking Leaving Certificate Agricultural Economics (Higher and Ordinary Level) 2008 - 2012

It can be seen from the data presented above that the majority of candidates take Agricultural Economics at Higher Level. It can also be seen that the total number of candidates taking Agricultural Economics shows a significant increase in 2012 on the previous two years.

1.4 Performance of Candidates

The number of candidates taking the Ordinary Level examination continues to represent a very small percentage of the cohort of Agricultural Economics candidates, with only one candidate sitting the Ordinary Level examination in 2012.

The following table sets out the percentage of candidates achieving each grade in the written examination at Higher Level in the years 2008 to 2012.

Percentage of candidates achieving each grade in the Higher Level

Year	Written Examination Only – 2008 - 2012								
	Number	A	B	C	ABC	D	E	F	NG
2008	71	7.0	33.8	22.5	63.3	16.9	14.2	4.2	1.4
2009	64	1.6	14.1	35.9	51.6	31.3	12.5	4.6	0.0
2010	30	6.7	20.0	30.0	56.7	30.0	6.7	6.6	0.0
2011	32	6.3	15.6	46.9	68.8	25.0	6.2	0.0	0.0
2012	84	8.3	16.7	31.0	56.0	21.4	17.9	4.8	0.0

Table 2 - Grade outcomes Leaving Certificate Agricultural Economics (Higher Level) Written Examination 2008-2012

Note: The grades here are indicative only. The grades awarded to candidates in Agricultural Economics are computed from the combined results of the practical coursework and written components completed by candidates.

In the written examination a consistently high percentage of candidates achieved a grade D or less between 2008 and 2012. Examiners continue to note that a number of candidates taking the Higher Level examination would be more suited to the Ordinary Level examination.

The main reasons reported by examiners for the poor performance of some candidates in the Higher Level written examination are as follows:

- Lack of sufficient knowledge of topics
- Limited understanding of economic concepts and theories as they apply to Agricultural Economics
- Very brief answers given with no development of points
- Lack of basic understanding of demand and supply diagrams, especially with reference to shifts and movement of curves
- Not answering the specific questions asked.

The following table shows the percentage of candidates achieving each grade at Higher Level, from 2008 to 2012, when the outcomes of the written examination and the coursework components are combined.

**Percentage of candidates achieving each grade at Higher Level
2008 to 2012 (Written Examination and Practical Coursework combined)**

Written Examination and Practical Coursework combined – 2008 - 2012								
Year	Number	A	B	C	ABC	D	E	F
2008	71	11.2	36.7	22.5	70.4	22.6	2.8	4.2
2009	64	1.6	23.4	35.9	60.9	31.3	7.8	0.0
2010	30	10.0	23.3	40.0	73.3	13.4	10.0	3.3
2011	32	9.4	18.8	59.4	87.6	9.3	3.1	0.0
2012	84	10.7	23.8	27.4	61.9	28.6	8.3	1.2

Table 3 – Grade outcomes Leaving Certificate Agricultural Economics (Higher Level) Written and Practical Examinations combined 2008-2012.

As can be seen, the addition of the practical coursework component improves the D minus outcomes significantly. It is unwise to draw much by way of conclusions from the statistical data arising from very small cohorts of candidate, however, the standard of work presented by candidates in 2012 compared favourably with previous years which had similar numbers taking the examination.

2. Ordinary Level written examination

2.1 Introduction

Only one candidate presented for the Ordinary Level written examination in 2012. It would be inappropriate to comment on the performance of one candidate, however, the following advice, of a general nature, is offered for prospective candidates.

2.2 Recommendations to Teachers and Students

The following recommendations are offered to teachers and students with the view to assisting them in improving examination performance.

Teachers are advised to

- refer to the published marking schemes and notes which can be accessed on the State Examinations Commission website www.examinations.ie
- refer to the syllabus in the Rules and Programme for Secondary Schools or on the Department of Education and Skills website
- instruct candidates to pay attention to all parts of the question and if asked to explain or discuss a topic, one-word / one-sentence answers will not suffice for full marks
- provide candidates with opportunities to practice writing examination style answers, and drawing diagrams that are relevant to the question asked that are sufficiently comprehensive in treatment
- pay particular attention to basic economic concepts / theories as they apply to the agricultural sector.

Students are advised to

- choose the questions carefully and complete the required number of questions and all parts within the questions
- practice writing answers to examination style questions
- ensure that all diagrams are drawn clearly and labeled correctly
- avoid one-word / one- sentence answers when asked to ‘discuss’ or ‘explain’.

3. Higher Level written examination

3.1 Introduction

A total of 84 candidates sat the examination at Higher Level, an increase of 162% on the previous year. The overall standard of answering was on a par with previous years.

Examiners noted that most candidates appeared to be well prepared for the short response type questions in Part I and they displayed a good knowledge of economic definitions and concepts. However, in Part 2, examiners noted that some candidates gave very brief answers which lacked any in-depth knowledge of the subject matter and that some did not answer the specific questions asked.

3.2 Analysis of Candidate Performance

The tables below set out the attempt frequency of questions, the average marks obtained per question and the respective rankings. The attempt frequency and the average marks given for each question are based on an analysis of all the scripts marked in the examination.

Attempt Question frequency at Higher Level – 2012			
Total No. of Candidates: 84			
Written Examination			
	Attempts	Attempts %	Ranking
Part 1	84	100%	1
Q1	75	89%	3
Q2	71	85%	4
Q3	65	77%	6
Q4	22	26%	7
Q5	76	90%	2
Q6	69	82%	5

Table 4 (i)

Average marks obtained at Higher Level – 2012			
Total No. of Candidates: 84			
Written Examination			
	Average Marks	Percentage Marks	Ranking
Part 1	74	61%	2
Q1	29	57%	3
Q2	21	42%	5
Q3	21	42%	5
Q4	19	37%	7
Q5	23	46%	4
Q6	31	63%	1

Table 4 (ii)

Tables (i) and (ii) – Attempt Frequency and Average Marks Obtained - Leaving Certificate Agricultural Economics (Higher Level) 2012.

As is evident from the data presented in the tables above, Questions 5 and 1 were the most popular questions, followed by Questions 2, 6 and 3. Question 4 was the least popular question. Question 6 had the highest average score with Question 4 having the lowest average score.

QUESTION ANALYSIS

PART I (120 marks)

This part of the written examination is mandatory. Candidates are required to attempt 15 short-response type questions out of a possible 20. All questions carry an equal weighting of 8 marks. A good knowledge of the entire syllabus is required in order to perform well in this part of the examination.

Attempt Frequency: 100%

Average Mark: 61%

This compulsory part had the second highest average mark overall. While the average mark was rather low (61%) relative to previous years, almost half (49%) of the candidates gained 100 marks or more out of the maximum 120 marks available.

The following is an analysis of candidates' answers to each question in Part I with specific reference to common errors.

QUESTION 1. The standard was poor in general. All candidates attempted this question but very few received full marks. While most candidates had the correct answer for grass proportion, the majority mixed up the percentages for forestry and crops.

QUESTION 2. Most candidates attempted this question but few received full marks. Many identified the role of *Teagasc* correctly but identifying the role of *An Bord Bia* proved difficult.

QUESTION 3. Most candidates attempted this question but few received full marks. While some had good answers, many candidates just mentioned supply and demand and failed to make any reference to prices.

QUESTION 4. The question was well answered by the majority of candidates, showing a good understanding of the given data.

QUESTION 5. The majority of candidates could define the term "Economics". The term "economic growth" proved difficult for some.

QUESTION 6. Answering in general was vague and lacked specific knowledge.

QUESTION 7. Knowledge of the impact of exchange rate fluctuations was good in general. However, some candidates thought Irish products would be more expensive in non-EU countries.

QUESTION 8. Many candidates just stated the formulas and did not define as required in the question. Other candidates used examples relating to a farm, ignoring the outcome verb, hence losing marks.

QUESTION 9. This question proved challenging for the majority of candidates. The standard of answering questions on demand and supply curves was generally below what is expected of a Leaving Certificate candidate in this subject.

QUESTION 10. This question was completed very well with candidates showing a good understanding of Engel's Law but many omitted the word "proportionate/percentage", thereby losing some marks.

QUESTION 11. Approximately half the candidature gave the correct formula here.

QUESTION 12. Most candidates gave two correct examples of variable costs but a significant number had only one example of a fixed cost.

QUESTION 13. Most candidates explained one of the terms correctly but failed to distinguish between them.

QUESTION 14. The majority of candidates received full marks in this question.

QUESTION 15. It was generally well answered, but some candidates gave answers that were not relevant.

QUESTION 16. This was well answered in general. Most candidates understood the role of the European Commission.

QUESTION 17. Most candidates stated two actual taxes rather than two categories which was required in the question. PAYE and PRSI were common answers given.

QUESTION 18. Most candidates recognised that part (i) had an inelastic demand but failed to give an explanation. Part (ii) was very poorly answered in general. There appears to be a general lack of knowledge of key economic concepts and theory as they apply to the agricultural sector.

QUESTION 19. Most candidates attempted this question but few received full marks as many just stated the ratios and did not elaborate or distinguish between the terms as was required.

QUESTION 20. Most candidates attempted this question but many restated the same benefit, thereby earning only half the marks.

PART 2 (Total marks: 200)

Part 2 comprises six questions. All questions carry an equal weighting of 50 marks. Candidates are required to answer any four questions.

Overall, the candidates who presented definitions precisely and who elaborated on all the points in the questions in Part 2 scored the highest marks.

Question 1

Attempt Frequency: 89%

Average Mark: 57%

This was the second most popular question on Part 2 of the examination paper. It also had the second highest average mark. The standard of answering varied. While 18 candidates gained 40 or more marks out of a maximum 50, twenty candidates were awarded less than 20 marks (40%).

- Q1. (a)** The diagram was very well drawn by most candidates but some candidates omitted the labeling.
- (b)** This part was generally well answered with most candidates receiving full marks.
- (c)** Most candidates made a good attempt at this as they were able to apply the figures to a given (supplied) formula. Those who failed to obtain the correct answers gained some marks for relevant computations.
- (d)** Candidates in general understood the economic concept and performed well.

Question 2

Attempt Frequency: 85%

Average Mark: 42%

This was the third most popular question on the paper. Only seven candidates gained 40 marks or more while 35 candidates were awarded less than 20 marks.

Candidates lost marks here by not developing their answers fully.

- Q2: (a)** The diagram was completed correctly by most candidates. However, some confused the total cost curve with a variable cost curve.
- (b) (i)** Although the majority of candidates were able to identify the range of output on the diagram, marks were lost for not explaining their answer, as required. Also some candidates only showed one part of the loss-making area on their diagram.
- (ii)** Again, while many candidates were able to identify the range of output on the diagram, many of them lost marks for not explaining their answer, as was required.
- (iii)** While most candidates knew that profit was maximized where the gap between total cost and total revenues is at its widest, they failed to show it correctly on the diagram, thereby losing some marks.
- (c)** About 50% of the candidates knew the correct definitions here, while there was some evidence of guesswork. Also, some candidates gave correct formulas earning some marks, but they did not distinguish between the given terms as was required in the question.

Question 3

Attempt Frequency: 77%

Average Mark: 42%

Overall, a poorly answered question. Only two candidates gained 40 marks or greater, while 30 candidates were awarded less than 20 marks.

- Q 3:**
- (a)** This was the best answered of the three parts of the question but many candidates had difficulty in drawing the correct diagram. The answer required a shift to the left in supply causing a movement along the demand curve leading to a higher equilibrium price. Many candidates also showed a shift in the demand curve and appeared unsure as to what was required.
 - (b)** Most candidates were able to state and show the demand increasing and a shifting of the demand curve to the right. However, the effect on market equilibrium was confusing in many cases. Many candidates showed movements along the demand or supply curve and not a shift. Some confused the supply and demand curves.
 - (c)** This part was poorly answered in general. Only 10-15% of candidates understood this part and answered it correctly while many candidates omitted this part of the question. No candidate received full marks and many candidates looked at the supply and demand curves for oil itself, and not agricultural products. It is important that candidates answer the precise question stated, if they are to achieve maximum marks.

Question 4

Attempt Frequency: 26%

Average Mark: 37%

This was the least popular question on the paper. Only one quarter of the candidature attempted this whereas at least three-quarters attempted every other question. It also had the lowest average mark. Only one candidate gained in excess of 40 marks while 13 candidates were awarded less than 20 marks.

A review of examination scripts indicates a general lack of knowledge of the CAP within the EU, which is surprising in light of its topicality.

- Q 4:**
- (a)** Most of the candidates who attempted this part of the question were able to state two objectives of the CAP. Most candidates failed to state how the CAP has evolved in recent years. It is important that candidates keep up-to-date with developments in the field of agriculture and have a thorough understanding of key topics in the syllabus.

 - (b)** This was poorly answered. Candidates failed to answer the question and did not show an understanding of the instruments involved. The change from product price support to producer supports was rarely given.

 - (c)** This part had some reasonable answers but the majority of candidates were able to name and explain only one challenge.

Question 5

Attempt Frequency: 90%

Average Mark: 46%

This was the most popular question with the third highest average mark. Only three candidates gained 40 marks or greater while 29 candidates scored under 20 marks.

Candidates in general performed poorly here due to the incorrect approach to part (b).

- Q 5**
- (a)** This part was very well answered by all candidates who attempted it.
 - (b)** Candidates did not answer this question as required and lost significant marks as a result. Instead of discussing the trends in Irish agriculture in general, they concentrated on the trends within the given cash flow budget, thereby omitting the reasons for the national trends in prices and costs in Irish Agriculture. It is important that candidates read the question carefully and understand the data presented before writing their answers if they are to achieve maximum marks.
 - (c)** This part presented no problems for candidates and it was well answered by those candidates who attempted it.

Question 6

Attempt Frequency: 82%

Average Mark: 63%

This was fourth in terms of popularity but it had the highest average mark on the examination paper. Overall 22 candidates were awarded 40 marks or greater while 13 candidates were awarded fewer than 20 marks.

This popular question was well answered and helped many candidates compensate for marks lost in earlier questions.

- Q 6.**
- (a)** The contributions of agriculture to the economy were well explained. Overall, a good standard of answering was evident here.
 - (b)** The answers to this question were of a very high standard and candidates really knew the subject matter. Some marks were lost by candidates who wrote very concise answers. When asked to discuss, candidates must give some detail in their answers. One-line answers will not suffice.

3.3 Conclusions

- Many candidates demonstrated satisfactory levels of knowledge and skills in the written examination at Higher Level. However, some candidates had a very limited understanding of the subject
- The standard of answering varied from excellent to poor
- The standard of answering also varied considerably between questions
- A failure to elaborate on points resulted in very low marks for some candidates.
- Responses to questions which require the ability to comprehend and apply economic concepts and theories to agricultural issues were frequently not of a high standard.
- Candidates who performed poorly demonstrated a lack of basic understanding of demand and supply diagrams, especially with reference to shifts and movement of curves.

3.4 Recommendations to Teachers and Students

The following recommendations are offered to teachers and students with a view to assisting them in improving examination performance.

Teachers are advised to

- use the syllabus as the base document when preparing students for the examination
- refer to the published marking schemes and notes which can be accessed on the State Examinations Commission website www.examinations.ie
- instruct candidates to pay attention to question cues, such as ‘outline’, ‘explain’ and ‘discuss’. The amount of detail required in the answers will depend on the question cue used
- instill basic economic skills as early as possible. Many candidates had problems with supply/demand questions. Candidates should have a clear understanding of equilibrium and of the rationale for the shifting of / movement along curves.
- provide candidates with opportunities to practise writing examination style answers that are relevant and sufficiently comprehensive in nature
- place additional focus on key economic concepts / theories as they apply to the agricultural sector and also to current developments in agricultural policy.

Students are advised to

- develop a thorough knowledge of key economic concepts as they apply to agriculture in order to gain marks in this examination.
- keep up-to-date with policy and current agricultural trends
- pay attention to the skills of analysis and evaluation
- understand the meaning of the outcome verbs used in the question (outline, discuss, explain, distinguish etc.)
- manage time effectively and answer the precise question stated if they are to achieve maximum marks
- complete the required number of questions and all sections within questions
- ensure that all diagrams are drawn carefully and labeled correctly
- avoid one-word /one-sentence answers when asked to ‘explain’ or ‘discuss’.

4. Practical Coursework

4.1 Introduction

Requirements for undertaking the Agricultural Economics practical coursework are stated in the Rules and Programme for Secondary Schools. The research project/practical coursework requirements are common to Higher Level and Ordinary Level. The research project/practical coursework carries a weighting of 20%.

This coursework is carried out during the year and the projects are assessed by the teachers in schools. Monitors, appointed by the SEC, monitor the completed coursework in May each year.

The total number of candidates who took the examination in 2012 was 87, which represented a 148% increase on the previous year's total of 35.

4.2 Analysis of Candidate Performance

Of the 95 original entrants, 87 presented projects. It is not wise to draw much by way of conclusions from the grade distribution arising from very small cohorts of candidates, however, breakdown of grades compares favourably with the figures for 2008, which was the last time there was a candidature approaching 87.

Total Grades Awarded 2012

GRADE	A	B	C	D	E	F
Candidates	45	20	13	6	3	0
%	51.7	23	15	6.9	3.4	0

A wide range of projects were presented for assessment in 2012. While many centres provided good investigative accounts, the better projects included both primary and secondary research, resulting in very informative and interesting investigations. Primary research methods such as interviews and questionnaires were used to support investigations.

Most investigative projects presented were in the traditional areas of the Irish Beef Industry; and the Irish Dairy Industry. However, this year some genuinely interesting topics were presented in new areas of development in Agriculture such as bio-energy and the growth of farmers' markets. No candidate presented the traditional Farm Accounts this year. However, eleven candidates presented an analysis of the Final Accounts of a profiled farm and incorporated ratios and trends showing a comparison with national statistics. All students interviewed demonstrated good knowledge of their work.

Examples of good practice

The better projects generally contained the following:

- Contents page
- A clear statement of the aims/objectives of the project

- A review of the research process carried out
- A focus on primary and secondary research results rather than elaborate accounts of theory
- Good use of headings and structure to outline the detail of each criteria of the research project
- Bar charts, graphs, photographs
- Statistical tables
- Incorporation of economic principles, linking them with project material
- Interpretation of the information in the project
- Recommendations/conclusions relating to the information in the project
- A bibliography

Common weaknesses

The following is a list of the common weaknesses reported by examiners

- Lack of clear relevant aims or sometimes no aims mentioned
- No details given of research carried out, even when it was obvious that the topic was researched
- No identification or listing of sources of information
- No bibliography
- Work placed in the appendices and not referred to in the main body of the project
- Grammatical, spelling and punctuation errors
- Pages of transcripts direct from the internet, with no analysis or interpretation or reference to source
- No reference to the criterion “Implications of economic principles as evidenced by project”
- Inadequate records shown to justify findings
- Failure to link work to economic principles, despite writing voluminous essays on certain aspects of the subject matter

- More emphasis on the scientific rather than the economic aspect of chosen topics
- Over-reliance on internet material with little or no understanding of it or its relevance to the project
- No critical appraisal/interpretation of project results or subsequent recommendations
- No conclusions linked with stated aims.

4.3 Conclusions

- Many projects were well organised and were presented under the specific headings outlined in the Marking Criteria.
- The better projects were well-researched small-scale topical projects including both primary and secondary research. The scale of the projects should reflect the marks available [80 marks (20%) of the total marks available 400 marks for the examination].
- A small number of projects were of limited relevance to the Agricultural Economics syllabus.
- There was some evidence of large quantities of material downloaded from the internet with no analysis and in some cases no relevance to the project work. This practice undermines the educational aims of the project work and the spirit of the subject syllabus.
- The high marks awarded in the project component helped many candidates towards an enhanced overall grade. The E+F+NG rate on the written paper was 22.7% compared to 9.5% on the overall examination.

4.4 Recommendations to Teachers and Students

In relation to the project work the following should be noted:

- All work presented should be the individual work of the candidates completed in accordance with the SEC requirements
- The aims of the project should be clearly identified
- The aims should be relevant to the subject Agricultural Economics
- The marking criteria should be available to all candidates to ensure that the different criteria are addressed in the project
- Evidence of research should be detailed (e.g. letters, completed questionnaires, interview questions)

- All sources and resources should be clearly identified and acknowledged by the candidate
- Work placed in the appendices should be referred to in the main body of the project
- If the internet is used as a source for research then accurate website references including date of access should be provided
- A strong emphasis should be placed on the importance of linking the work of the project to economic principles, as this is essential and is what gives the subject Agricultural Economics its distinct character.