



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate 2012

Marking Scheme

AGRICULTURAL ECONOMICS

Ordinary Level

LEAVING CERTIFICATE 2012

AGRICULTURAL ECONOMICS

ORDINARY LEVEL

**MARKING SCHEME
AND
SUPPORT NOTES**

Marking Scheme and Support Notes for use with the Marking Scheme.

In considering the marking scheme the following points should be noted:

- The support notes presented are not exclusive or definitive.
- The support notes in many cases contain key phrases which must appear in the candidate's answer in order to merit the assigned marks.
- Further relevant points of information presented by candidates are marked and rewarded on their merits.
- The detail required in any answer is determined by the context and the manner in which the question is asked and by the number of marks assigned to the answer in the examination paper. Requirements may therefore vary from year to year.

PART I (120 Marks)

20 QUESTIONS – 15 QUESTIONS TO ANSWER.

ALL QUESTIONS CARRY EQUAL MARKS (8 MARKS)

Outline Marking Scheme

1.	8 marks	11.	2 @ 4 marks each
2.	8 marks	12.	3 + 3 + 2 marks
3.	2 @ 4 marks each	13.	8 marks (4 + 4)
4.	3 + 3 + 2 marks	14.	8 marks
5.	8 marks (4 + 4)	15.	8 marks
6.	8 marks (4 + 4)	16.	8 marks (4 + 4)
7.	8 marks (4 + 4)	17.	8 marks (4 + 4)
8.	8 marks (4 + 4)	18.	8 marks (4 + 4)
9.	8 marks (4 + 4)	19.	8 marks (4 + 4)
10.	8 marks	20.	8 marks (4 + 4)

PART II (200 Marks)

6 QUESTIONS - 4 QUESTIONS TO ANSWER AT 50 MARKS EACH.

1. (a) Axes 2 @ 2 marks
Curves 2 @ 2 marks
Equilibrium point 2 marks 10
- (b) Explanation @ 8 marks (4 + 4) 8
- (c) (i) Explanation 5 marks (3m + 2m)
Diagram 3 marks 8
(ii) Explanation 5 marks (3m + 2m)
Diagram 3 marks 8
(iii) Explanation 5 marks (3m + 2m)
Diagram 3 marks 8
- (d) Two economic effects @ 4 marks each 8

[50 marks]

2. (a) (i) Explanation 5 marks 5
(ii) 2 benefits @ 6 marks each (3m + 3m) 12
(iii) 2 factors @ 6 marks each (3m + 3m) 12
- (b) Three principles of co-ops @ 5 m each (2m + 3m) 15
- (c) Niche market explanation @ 4 marks
Example @ 2 marks 6

[50 marks]

3.	(a)	Marginal Cost and Marginal Revenue	
		2 @ 8 marks each	16
	(b)	Diagram	8 marks
	(c)	Explanation	12 marks
	(d)	Explanations: 2 @ 5 marks	
		Examples: 2 @ 2 marks	14
			[50 marks]
4.	(a)	Calculations	34 marks
	(b)	Four examples @ 4 marks each	16
			[50 marks]
5.	(a)	(i) Banking relationship	6 marks (3m + 3m)
		(ii) 2 ways of improving it @ 4 marks each	14
	(b)	(i) 2 reasons @ 6 marks each	
		(ii) Explanation	8 marks
			20
	(c)	(i) 2 options @ 4 marks each	
		(ii) 2 difficulties @ 4 marks each	16
			[50 marks]
6.	(a)	2 objectives @ 8 marks each	16
	(b)	One economic challenge: 8 marks	
		One environmental challenge: 8 marks	16
	(c)	3 effects @ 6 marks each	18
			[50 marks]

AGRICULTURAL ECONOMICS 2012

ORDINARY LEVEL

SUPPORT NOTES

PART I (120 Marks)

1. Conacre generally refers to the rental of agricultural land for a period of:
(Tick (✓) the appropriate box)

11 months 12 months 24 months

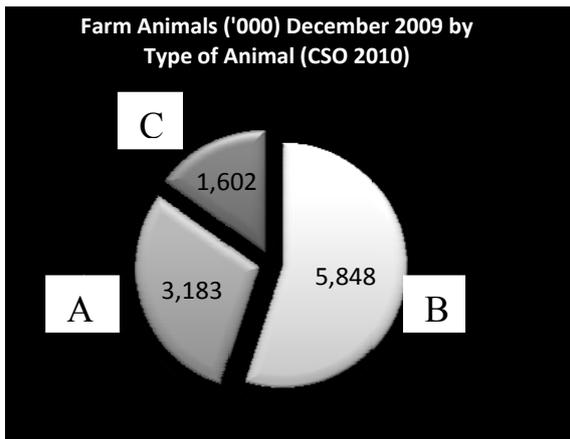
2. The proportion of capital needed to replace outworn farm machinery, equipment and buildings is called

Depreciation.

3. “No farmer who will supply more milk than his/her quota allows can afford to ignore the super levy threat between now and 2015.”
Explain (i) the super levy threat and (ii) the significance of the year 2015.

- (i) The super levy is a fine imposed on milk producers when the national milk quota is exceeded.
(ii) The milk quota ends in 2015.

4. The pie chart below shows the livestock of the national economy (cattle, sheep, pigs) in December 2009. according to their relative size. In the box below, state which livestock is represented by A, B and C.



A	B	C
Sheep	Cattle	Pigs

5. Although the price of pig meat increased considerably in 2011, pig farmers were not better off.
Explain **one** reason for this.

The increase in input costs has matched the increase in pig meat prices.

6. Irish agricultural receipts from the EU are approximately €1.6 billion per year, of which the single farm payment accounts for approximately €1.3 billion. Explain 'single farm payment'.

The Single Farm Payment Scheme pays farmers for the land that they manage or own. Farmers can submit a claim for each year based on their land and their entitlements. In order for farmers to qualify for payments under the scheme, they must meet Cross Compliance standards.

7. The price elasticity of demand for beef is -1.5 .
A 10% increase in price would lead to a **15% decrease** in quantity demanded.
8. The rate of unemployment in November 2011 was 14.5% (CSO statistics).
State **one** effect of this very high rate of unemployment on farming.

Difficult for farmers to get part time jobs/off farm employment.
Casual farm workers emigrating.

9. Name the reward/payment earned by each of the following Factors of Production:

Factor	Reward/Payment
LAND	Rent
CAPITAL	Interest

10. The estimated percentage of all Irish dairy production exported in 2010 was:
(Tick (✓) the appropriate box)

10% 50% 80%

11. The production function describes the relationship between **products** and **factors**.
12. Fill in the **three** other components (Ps) of the marketing mix in the spaces provided:

PRODUCT	PRICE	PROMOTION	PLACE
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13. The World Trade Organisation was set up in 1995. State its main objective.

To promote Free Trade by persuading countries to abolish import tariffs and other barriers.

14. The long-term financial position of the farm is measured by the debt / **equity** ratio.

15. According to the Teagasc National Farm Survey, the average farm income in Ireland in 2010 was:

(Tick (✓) the appropriate box)

€18,000 €32,000 €54,000

16. The Nitrates Directive was introduced by the EU in 1991.

(i) Outline its main objective:

It is concerned with the protection of waters against pollution by nitrates from agricultural sources – has the objective of reducing water pollution caused or induced by nitrates from agricultural sources.

(ii) Explain the term ‘Directive’:

A **directive** is a legislative act of the European Union, which requires member states to achieve a particular result without dictating the means of achieving that result.

17. One of the roles of the IFA is lobbying in relation to CAP reform. Explain the term ‘lobbying’:

Lobbying is the act of attempting to influence decisions made by officials in the government. Lobbying is done by various people or groups, in this case the Irish Farmers Association, who wishes to have its views on CAP reform acknowledged and implemented.

18. According to Engel’s Law, higher income groups spend a **smaller** proportion of their total income on **food** than lower income groups.

19. Outline why a farmer might need to make an investment appraisal.

Investment appraisal calculates the extra revenue and extra expenses resulting from a plan or project over time and relates these to the farmer’s investment in the project to determine if a sufficient profit is likely.

20. State **one** limitation of a food aid policy to developing countries.

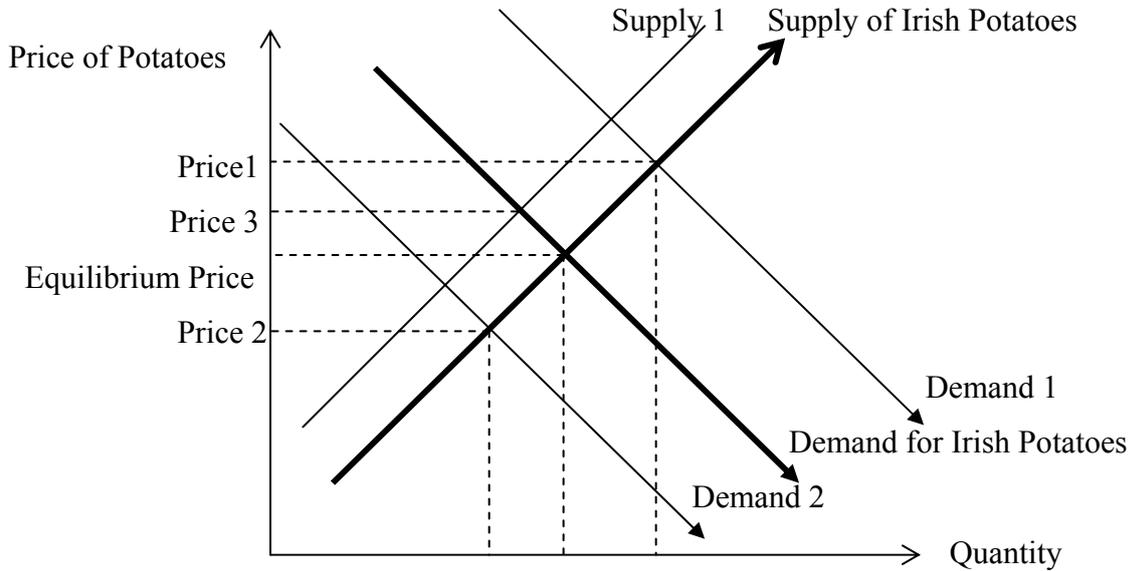
Expensive undertaking.
May dislocate trade or native production.
Logistical problems.

PART II (200 MARKS)

6 QUESTIONS – 4 QUESTIONS TO ANSWER AT 50 MARKS EACH

1. The following diagram represents the Demand for Irish Potatoes and the Supply of Irish Potatoes in Irish Supermarkets. Copy the diagram into your answer book.

(a) Label both axes, the demand for potatoes, the supply of potatoes and the equilibrium price in Irish Supermarkets.



(b) Pasta is considered by many to be a substitute for potatoes. Explain the economic term ‘substitute good’.

Substitute goods can be used in place of each other, so that as the cost of one rises, everything else being the same, people will buy more of the other good. For example, Coke and Pepsi, pasta and potatoes. The price of such goods shows positive cross-elasticity of demand. Thus, if the price of one good goes up the demand for the other rises.

(c) Explain with the aid of a separate diagram in each case the effects which **each** of the following may have on **either** the Demand for Irish Potatoes **or** the Supply of Irish Potatoes.

(i) a successful advertising campaign in favour of Irish potatoes is introduced:

The demand curve may shift to Demand 1. The equilibrium price will increase to Price 1.

(ii) a tariff on imported potatoes is removed:

The removal of a tariff will result in an additional supply of imported potatoes in supermarkets, possibly reducing the demand for Irish Potatoes to Demand 2, and reducing the price from equilibrium Price to Price 2.

(iii) bad weather conditions in the spring cause potato blight:

Bad weather reduces the supply of Irish Potatoes to Supply 1, scarcity increases the price of Irish potatoes in the supermarket from equilibrium Price to Price 3.

(d) Outline **two** economic effects on farming of the current supermarket price wars.

- Reduced income for farmers – supermarkets selling below cost.
- Supermarkets importing food – not buying from Irish farmers.
- Smaller farmers squeezed out.
- Farmers having to change to alternative output / diversify.

2. (a) Farmers' markets have become popular in Ireland in recent years.

(i) Explain the term 'farmers' market'.

A **farmers' market** consists of individual vendors—mostly farmers—who set up booths, tables or stands, outdoors or indoors, to sell fresh locally produced produce, meat products, fruits and sometimes prepared foods and beverages directly to consumers. Farmers markets add value to local communities.

(ii) Explain **two** benefits to farmers of selling their produce in farmers' markets.

- The markets help farmers stay in business as well as preserve natural resources.
- Farmers who sell direct to consumers without going through a middle man get a better price.
- Farmers' markets are a great outlet for selling home produced organic foods to consumers.
- Farmers' markets help farmers maintain important social ties, linking rural and urban populations and even close neighbours in mutually rewarding exchange.
- Consumers can buy directly from the farmer/producer.

(iii) Explain **two** factors a farmer should consider when selling at a farmers' market.

- Quality and freshness – Offering products of a high quality will encourage consumers to visit the market on a regular basis. One bad experience may mean a customer never returns again and poor word of mouth can have even more severe implications.
- Consistency – It will take some months before a farmer's name/product becomes established and it is critical to stick with the market for at least six months. Regular attendance, even in bad weather, is vital so that customers are not disappointed.
- Promotion – For a market to be successful an effort must be made to inform customers and potential vendors that a market is or will be in operation. Therefore, promotion of the market is vital, i.e. interviews on local radio or adverts in newspapers, flyers etc.
- Product display – It is important to ensure that the stall looks attractive at all times, is properly merchandised and is visually appealing.
- Price – The farmer's pricing needs to be competitive and all costs must be included in the selling price. Consumers are increasingly seeking out good value and quality, so farmers should make sure that prices are clearly shown – lack of price signs can put consumers off considering a purchase.
- Tasting – It is important to allow as many customers as possible taste the product. It provides an opportunity for customers to stop at the stall without feeling under pressure to buy.

(b) The co-operatives is a form of business unit in agriculture.
Explain **three** of the key principles of agricultural co-operatives.

- Membership should be voluntary, with no discrimination against anyone willing to accept the responsibilities of membership.
- Co-operatives should be democratic organisations. Voting should be one person one vote regardless of the number of shares held.
- Share capital should receive a strictly limited dividend, if any.
- Any surplus made belongs to the members and should be distributed in proportion to the members' trade with the co-operative.
- Members and the general public should be offered education in the principles and technique of co-operation.
- There should be co-operation among co-operatives for the common benefit of all members.

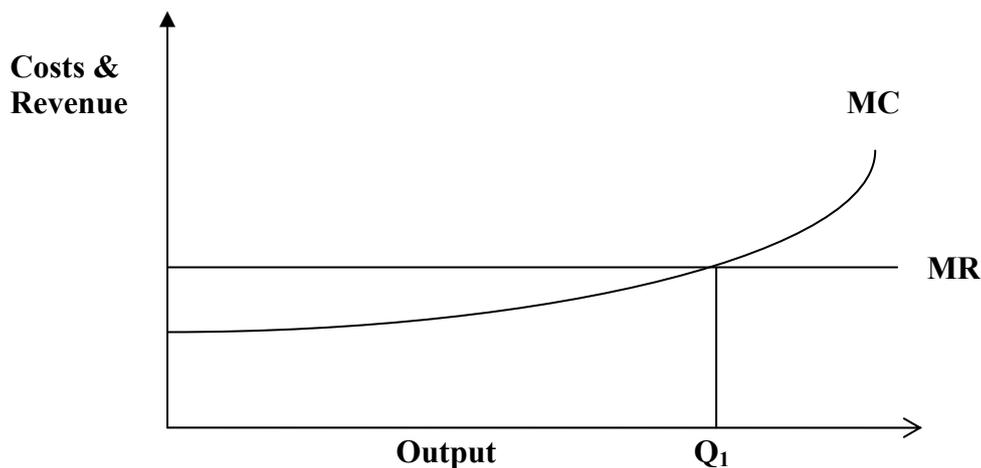
(c) Organic farming represents a niche market.
Explain the term 'niche market' and state **one** other agricultural example.

A **niche market** is a focused, targetable portion of a market.

A business that focuses on a niche market is addressing a need for a product or service that is not being addressed by mainstream providers. A niche market is a **narrowly defined group of potential customers**.

Example: Home made cheese.

3.



- (a) Explain the difference between Marginal Cost and Marginal Revenue.

Marginal cost is the change in total costs per additional unit of output.

Marginal Revenue is the change in total revenue per additional unit of output or the price of the product.

- (b) Copy the diagram into your answer book and identify on the diagram the most profitable level of output (use label Q_1).

The most profitable level of output (Q_1) is where the two curves intersect.

- (c) Explain why producing either more or less of this output (Q_1) would be less profitable.

Less than Q_1 – profits can increase because the marginal cost is less than marginal revenue.

Greater than Q_1 – profits decrease because the marginal cost is greater than the marginal revenue.

It is profitable to expand so long as the price of the product is greater than its marginal cost.

- (d) Distinguish between *factor inputs* and *intermediate inputs*. Give **one** example of each.

Factor Inputs are the factors owned by the farmer.

Examples: Land, Labour, Capital, Management

Intermediate Inputs are the products of other industries & firms.

Examples: feed, fertiliser

4.	(a) (i) Farm Output:		
	Sales less purchases of	Milk	95,000
		Livestock	38,000
		Crops	2,500
	Household consumption of own produce		7,500
	Change in inventories		<u>-6,000</u>
	Farm Output		137,000

(ii) Farm Gross Margin equals	
Farm Output	137,000
Less Variable Costs	<u>37,000</u>
Farm Gross Margin	100,000

(iii) Family Farm Income Equals	
Farm Gross Margin	100,000
Less Fixed Costs	<u>32,000</u>
Family Farm Income	68,000

(b) (i) State **two** examples of “Other fixed costs”.

Permanent labour
 Rent
 Own machinery expenses
 Rates.

(ii) State **two** examples of variable costs as they apply to agriculture.

Purchased feed
 Fertilisers
 Purchased seeds
 Casual labour
 Hire of machinery.

5. “A positive relationship with a bank is essential for a farmer.”

(a) (i) Outline why a farmer needs to have a good relationship with his/her bank.

- May need cash flow due to volatility in prices.
- May need finance for the day-to-day running of the business.
- Impact of weather.

(ii) Outline **two** ways a farmer could improve his/her banking relationship.

- Maintaining accounts – Furnishing complete, accurate and up-to-date accounts of the farm business will help a lender in assessing a loan application.
- Know the business well – It is important for a farmer to know his business so he can successfully communicate his business plans to the bank e.g. knowing his production costs, his efficiency factors and his existing financial commitments.
- Farm Management – It is very important to prepare a farm plan which takes account of the immediate future and where the farm is going in the long term.
- Openness with the Bank – It is important that a borrower keeps the lender fully informed of the farming business, both at an initial loan application stage and going forward. If a financial problem occurs, the farmer should talk to his bank as early as possible to discuss the most appropriate options.

(b) (i) Outline **two** reasons why a farmer would need credit in the short term.

- Urgent costly repair bills to equipment
- Buying fertilisers/seeds/feed in bulk to avail of discounts
- Seasonal labour costs.

(ii) Explain how a bank overdraft works.

A bank overdraft is a loan from a bank which allows a current account holder to draw more from the account than the account contains. The current account holder must have prior permission from the bank to do this and the bank also sets a limit on the amount that can be borrowed. The money can be withdrawn and repaid on a flexible basis. Interest is charged on the overdrawn balance. The overdraft must be cleared once per year.

(c) Despite careful planning, a farmer is experiencing difficulty in meeting the agreed repayment schedules on a €100,000 loan he has borrowed for farm machinery.

(i) Outline **two** possible options for the farmer.

(ii) Explain the difficulties each option would create for the farmer.

Options	Difficulties
Sale of assets	This would bring in extra cash but might leave the farmer having to lease assets or property later on.
Reduction in living expenses	While the farmer would have a reduced living standard, the savings made might not be enough to make up the loan repayments.
Extension of period of repayments	This adds extra years to the loan and may inhibit future expansion.
Get a part time job to bring in extra income	The extra income might not be enough on its own to make up the repayments; also the farmer would have less time to develop the farm and it is very difficult in the current economic climate to obtain employment.

6. (a) Outline **two** objectives of the Common Agricultural Policy (CAP) of the EU, which came into effect in 1962.
- To increase agricultural productivity
 - To ensure fair living standards for the agricultural community
 - To stabilise markets
 - To ensure availability of food
 - To provide food at reasonable prices.
- (b) The CAP needs reform to respond to current economic challenges and environmental challenges.
Outline **one** economic challenge and **one** environmental challenge currently facing the CAP.
- Economic challenges:**
Food security
Price variability
Economic crisis / EU Budget
- Environmental challenges:**
GHG emissions
Soil depletion
Water/air quality
Habitats and biodiversity.
- (c) Discuss the effects on Irish Agriculture of the entry of new member states into the EU in recent years.
- (i) More export markets;
 - (ii) Increased sources of labour;
 - (iii) More investment opportunities / Joint ventures;
 - (iv) Less rural development funds /Less finance available;
 - (v) New products on the market/niche markets.

