



Coimisiún na Scrúduithe Stáit
State Examinations Commission

LEAVING CERTIFICATE 2010

MARKING SCHEME

AGRICULTURAL ECONOMICS

ORDINARY LEVEL

LEAVING CERTIFICATE 2010
AGRICULTURAL ECONOMICS
ORDINARY LEVEL
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.	4 @ 2 marks each	11.	8 marks
2.	8 marks	12.	2 @ 4 marks each
3.	8 marks	13.	8 marks
4.	2 @ 4 marks each	14.	8 marks
5.	2 @ 4 marks each	15.	8 marks
6.	2 @ 4 marks each	16.	8 marks
7.	8 marks	17.	8 marks
8.	8 marks	18.	8 marks
9.	8 marks	19.	8 marks
10.	8 marks (3 m + 2 m + 3 m)	20.	8 marks

PART II (200 Marks)

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

- | | | | | |
|-----------|------------|--|---------------------------|----|
| 1. | (a) | Explanation of food chain stages | 20 marks (6 m + 7 m + 7m) | 20 |
| | (b) | Safeguarding of food chain - Two explanations @ 5 marks each | | 10 |
| | (c) | Implications for Irish Agriculture | 20 marks (10 m + 10 m) | 20 |

[50 marks]

- | | | | | |
|-----------|------------|-------------------|----------------------------|----|
| 2. | (a) | (i) Calculations | 20 marks (7 m + 7 m + 6 m) | |
| | | (ii) Gross Margin | 10 marks | 30 |
| | (b) | (i) Explanation | 5 marks | |
| | | Example | 5 marks | |
| | | (iii) Explanation | 5 marks | |
| | | Example | 5 marks | 20 |

[50 marks]

- | | | | | |
|-----------|------------|---|----------------------------|----|
| 3. | (a) | Calculation of Net Worth | 10 marks (4 m + 3 m + 3 m) | 10 |
| | (b) | Calculation of Liquidity Ratio | 10 marks (4 m + 3 m + 3 m) | |
| | | Advice | 10 marks (2 @ 5 m) | 20 |
| | (c) | Two options @ 10 marks each (5 m + 5 m) | | 20 |

[50 marks]

4.	(a)	Law of Diminishing Marginal returns	10 marks (5 m + 5 m)	10
	(b)	Two types of input @10 marks (5 m + 5 m) each		20
	(c)	Diagram	15 marks graded	
		Impact	5 marks	20
				[50 marks]
5.	(a)	Matching of diagrams	3 @ 10 marks (4 m + 6 m)	30
	(b)	Three factors	20 marks (7 m + 7 m + 6 m)	20
				[50 marks]
6.	(a)	Organisation	5 marks	
		Role	10 marks (2 @ 5 m)	15
	(b)	Three factors @ 5 marks each		15
	(b)	Economic impact	2 @ 10 marks (5 m + 5 m)	20
				[50 marks]

Agricultural Economics – Ordinary Level

Support Notes

PART I

1. Services, Industry/Manufacturing, Agriculture (in order of magnitude).
2. 51%
3. Management is defined as that factor of production which organises the other factors of production to produce goods and services.
4. Principles of a Co-operative:
 - Membership should be voluntary
 - Democratic – one man one vote
 - Limited dividend on share capital
 - Proportionate distribution of surplus amongst members
 - Education of members
 - Cooperation between co-operatives
5. Name two characteristics of agriculture that are averse to marketing.
 - Large number of relatively small units
 - Geographical dispersal of farming
 - Variation of supply of agricultural products
 - Bulky and perishable nature of agricultural products
 - Over-supply of agricultural products on international markets
6. Name two of the three production periods in supply analysis.
 - Market period
 - Short run period (intra production)
 - Long run period (inter production)
7. Explain what is meant by Third Party Insurance:

Liability cover purchased by an insured (the first party) from an insurer (the second party) for protection against the claims of another (the third) party. The first party is responsible for its own damages or losses whether caused by itself or the third party.
8. Name the index used to measure inflation in the Irish Economy: The Consumer Price Index
9. False
10. (i) viable farmers
(ii) potentially viable farmers
(iii) non-viable farmers

11. Explain the term Economic Growth:

Economic growth may be defined as the continued rise in the volume of a nation's output of economic goods and services. Economic growth is measured by changes in GDP/GNP over time.

12. Two disadvantages of imports for Irish producers:

- Greater choice for consumers so reduced demand for domestically produced product;
- Increased competition, lower prices, lower incomes;
- Reduced food output and employment.

13. State one way a loan from the bank can be secured.

Collateral; Guarantor; Savings.

14. One reason why farmers are regarded as price takers:

They operate in perfectly competitive market/large number of buyers and sellers/
produce homogeneous products/demand curve is perfectly elastic.

15. One Method used to calculate depreciation:

Declining Balance Depreciation / Straight Line Depreciation

16. An EU Directive is binding only as to the results to be achieved while leaving within prescribed limits the choice of means to be employed to the member states.

17. In the context of the C.A.P, the method of price support was the major element guaranteeing incomes to farmers. The direct payments received by farmers were linked to their level of production. The more the farmer was producing, the higher the transfer from the EU budget. Decoupling was introduced in 2003 and means breaking the link between the direct payment to the farmer and the level of production.

18. The demand for a good is said to be "price elastic" if **the percentage change in quantity demanded is greater than the percentage change in price** (in absolute terms)

OR

The price elasticity of demand is between 1 and ∞ (in absolute terms)
Demand is very responsive to a change in price.

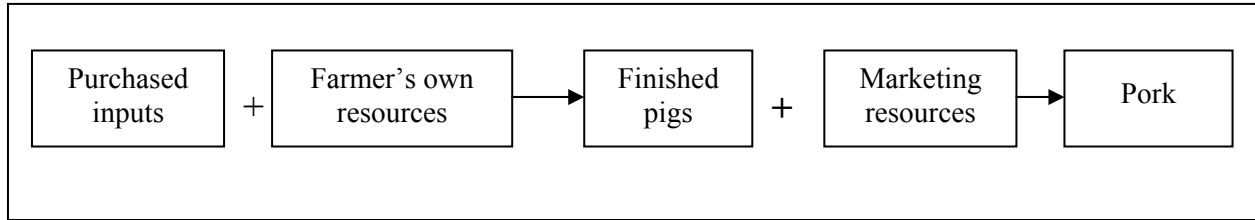
19. The difference between Gross & Net Capital Formation is **Depreciation**

20. Agricultural policy can be defined as 'any economic activity of the Government or the EU Council of Ministers aimed at achieving certain objectives in relation to agriculture.

PART II

Support Notes

1. (a) Explain **each** of the stages of the food chain, which ends with pork as purchased by the Irish consumer.



In addition to his own resources, the farmer also employs purchased inputs that are not his own. e.g. he buys building materials to construct accommodation for animals – feeding areas etc., and he may buy feed to supplement what he produces on this own farm, Veterinary & energy costs may also be incurred.

These purchased inputs combined with his own resources of land, labour, capital and management produce agricultural output, in this case pigs.

This in turn moves through the marketing system where it can be transported, stored, processed, packaged and finally sold to the consumer as pork.

- (b) Outline how the Pig Industry could safeguard the food chain for pork.
- Adhere to Department of Agriculture Food and Fisheries guidelines
 - Specify acceptable (authorized) input use (grain, protein etc.)
 - Monitoring/inspecting of processors and farmers
 - Award good producers for representing best industry practice
 - Pig industry only issue Irish processed pig meat to reputable food production companies
- (c) What would be the implications for Irish agriculture of not safeguarding the food chain?
- Damage to human health- loss of confidence in Irish Agriculture
 - Damage to reputation of Irish Food - “the food island”
 - Loss of sales for Irish Agri-foods
 - Reduction in farm incomes
 - Increased costs of monitoring/inspection and remedial efforts to address a flawed food chain
 - Loss of jobs for people working in the processing sector
 - Decline in full-time farmers and increased numbers of part-time farmers
 - Tradition of agricultural production would decline
 - Increased promotional costs.

2. Given the following financial account data for an Irish farm:

OUTPUT (€)

Product	Sales less Purchases	Changes in Inventories	Household Consumption	Total Output
Cattle	48,000	- 4,000	0	
Crops	5,000	+1,000	200	
Total	53,000	-3,000	200	

(a) Calculate the following (showing all your workings):

(i) The total output for **each** product category **and** for the farm as a whole;

Product	Total Output
Cattle	44,000
Crops	6,200
Total	50,200

(ii) The Gross Margin for the farm as a whole, if variable costs were €20,000.

Answer: €30,200 (50,200 – 20,000)

(b) Explain the following, using an example in each case:

(i) An inventory change:

Inventories refer to build-up of stock for sale in the future. An inventory change refers to a change in the value of these

(ii) Variable Costs:

Variable costs are costs that vary with the level of output.

Example: farmer plants more seed and the variable costs of fertilizer accordingly.

Other: part-time labour, feed.

3. The following figures are taken from a Tillage Farmer's Balance Sheet on 31 December 2009.

Assets €		Liabilities €	
Fixed Assets		Long- term	
Land,	300,000	Loans Outstanding	
Buildings &		for Building &	
Machinery	200,000	Machinery	160,000
Current Assets		Current Liabilities	
Feed	1,000	Bank Overdraft	15,000
Seed	4,000	Other Creditors	45,000
Liquid Assets	35,000		
		Net Worth	?
	540,000		540,000

Using the above information:

- (a) Calculate (showing all your workings) the farm's Net Worth:

$$\text{Net worth} = \text{€}540,000 - \text{€}220,000 = \text{€} 320,000.$$

- (b) Calculate (showing all your workings) the farm's Liquidity ratio **and** on the basis of this ratio, advise the farmer, who is considering the purchase of a new tractor.

$$\text{Liquidity ratio} = \text{liquid assets} : \text{current liabilities}$$

$$= 35,000 : 60,000$$

$$= 0.58: 1$$

This means than the farm is relatively illiquid. Liquid assets are not sufficient to meet current liabilities.

The farmer may experience difficulty if short term creditors press for payment. The farmer could sell some assets in order to purchase a new tractor/maybe lease the tractor.

- (c) Outline **two** possible options for a farmer experiencing difficulty in meeting loan repayments.

Sell assets
Cut living standards
Extend period of repayments.

[50 marks]

4. The total product curve describes the relationship between output and input on Farm X. It shows the “output increasing but at a decreasing rate”.

(a) Name the economic law the underlined concept above refers to.

Law of Diminishing Marginal returns

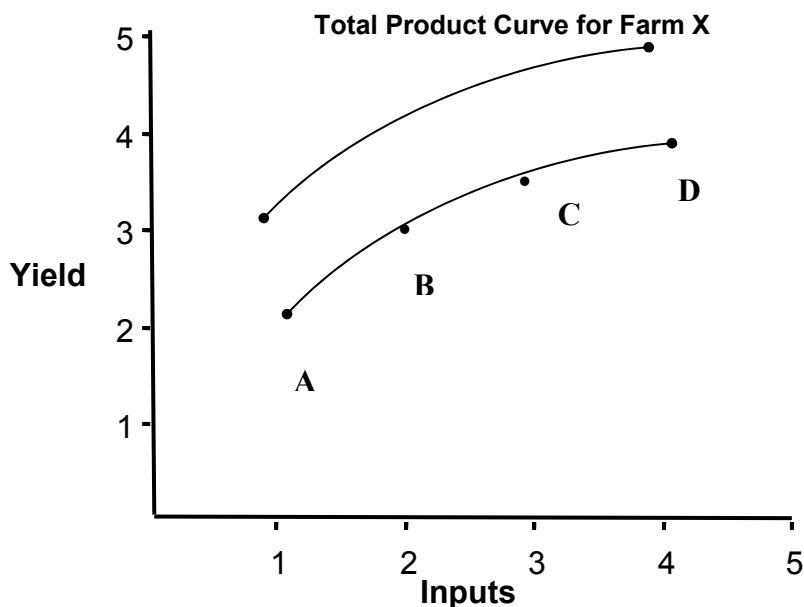
(b) Inputs can be classified as *factor inputs* and *intermediate inputs*. Distinguish between these two types of inputs, giving **one** example in each case.

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.

(c) The farmer as owner of Farm X has purchased new advanced machinery for the farm. Explain, with the aid of a diagram, the likely impact this would have on the Total Product Curve for Farm X.

Diagram - shift total product curve upwards



New & correctly positioned total product curve to the left of existing curve.

Explanation: new advanced machinery allows more production for each level of the variable input.

5. The three diagrams below represent changes in the market demand for beef.

Diagram 1

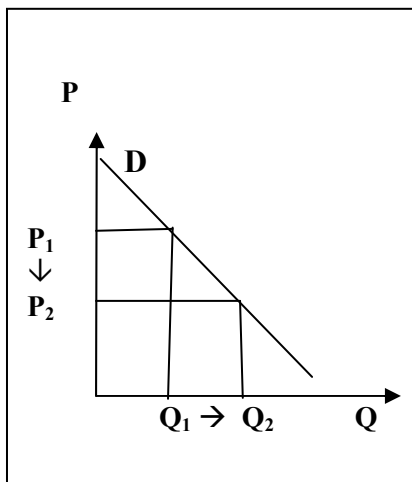


Diagram 2

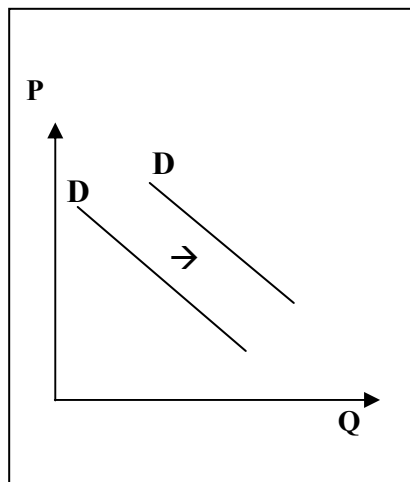
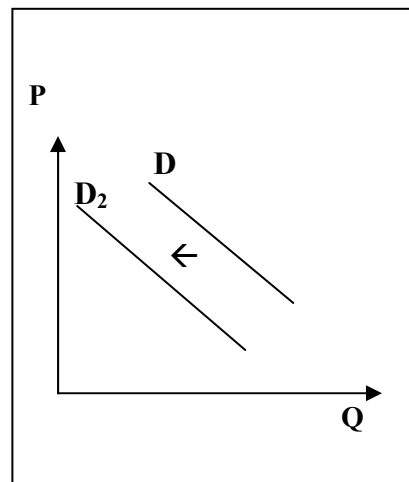


Diagram 3



Three of the following developments are represented by the above diagrams:

- (a) Match **each** diagram with the appropriate development from the list above. In **each** case explain why demand reacts as illustrated on the diagram.

Diagram 1 - (iii), A movement along the demand curve from P_1 to P_2 .

Diagram 2 - (i) More is demanded at each price level with increased promotion of beef.

Diagram 3 - (iv) Less is demanded at each price level as when income falls so does demand for beef the normal good.

- (b) Ireland is the fifth largest beef exporter in the world. State **three** factors which have contributed to its success.

- Quality of beef
- long grass growing season adds to flavour & health qualities
- cattle health & movement monitoring
- modern production methods ensure consistency.

6. Farm incomes fell in 2009 and some farming organisations expect them to fall again in 2010.

(a) Name **one** farming organisation and outline its role.

IFA = Irish Farmers Association

ICMSA = Irish Creamery & Milk Suppliers Association

Role: "Farmers organisations have an important part to play in the formation of policy relating to their industry. They propose and evaluate policy alternatives and have a keen interest in the implementation of policy. They advocate the farmers' case in an attempt to increase their share of national prosperity"

ICSA= Irish Cattle & Sheep Farmers Assoc.

- Represents commercial cattle, sheep and suckler farmers
- Offers alternative perspective on farming politics and rural issues in Ireland.

Macra na Feirme

- Provide young farmers with training to ensure livelihood and provide a social outlet for young farmers
- Voluntary organisation representing young people 17-35 years
- Personal development of members

ICOS= Irish Co-operative Organisation Society

- Provides services to members' co-ops and represent them on national and international organisations.
- A social partner.

(b) Outline **three** factors which have contributed to the decline in farm incomes.

- Reduced farm prices,
- Increased costs (energy, inputs)
- Recession
- Less investment income
- Poor weather.

(c) Discuss the possible economic impact of reduced farm incomes on rural towns and villages in Ireland.

- Reduced disposable income means farmers have less expenditure for goods and services in rural towns and villages.
- Income and job losses in rural towns and villages
- Farmers engaging in less investment in farms due to lower incomes, therefore less spent on local tradesmen etc.
- Less access to capital.



Coimisiún na Scrúduithe Stáit

Marcanna Breise as ucht freagairt trí Ghaeilge

Léiríonn an tábla thíos an méid marcanna breise ba chóir a bhronnadh ar iarrthóirí a ghnóthaíonn níos mó ná 75% d'iomlán na marcanna.

N.B. Ba chóir marcanna de réir an ghnáthrata a bhronnadh ar iarrthóirí nach ghnóthaíonn níos mó ná 75% d'iomlán na marcanna don scrúdú. Ba chóir freisin an marc bónais sin a **shlánú síos**.

Tábla 320 @ 10%

Bain úsáid as an tábla seo i gcás na n-ábhar a bhfuil 320 marc san iomlán ag gabháil leo agus inarb é 10% gnáthrata an bhónais.

Bain úsáid as an ghnáthrata i gcás 240 marc agus faoina bhun sin. Os cionn an mharc sin, féach an tábla thíos.

Bunmharc	Marc Bónais
241 - 243	23
244 - 246	22
247 - 250	21
251 - 253	20
254 - 256	19
257 - 260	18
261 - 263	17
264 - 266	16
267 - 270	15
271 - 273	14
274 - 276	13
277 - 280	12

Bunmharc	Marc Bónais
281 - 283	11
284 - 286	10
287 - 290	9
291 - 293	8
294 - 296	7
297 - 300	6
301 - 303	5
304 - 306	4
307 - 310	3
311 - 313	2
314 - 316	1
317 - 320	0

