Coimisiún na Scrúduithe Stáit
State Examinations Commission

LEAVING CERTIFICATE 2011

MARKING SCHEME

AGRICULTURAL ECONOMICS

ORDINARY LEVEL

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MARKING SCHEME

and

SUPPORT NOTES
for use with the Marking Scheme

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

- In many instances only key words are given i.e. these words must appear in the correct context in the candidate's answer in order to merit the assigned marks.
- The descriptions, methods and definitions in the scheme are not exclusive or definitive and alternative valid answers are acceptable.
- 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.

AGRICULTURAL ECONOMICS - ORDINARY LEVEL

PART I (120 Marks)

20 QUESTIONS – 15 QUESTIONS TO ANSWER.

ALL QUESTIONS CARRY EQUAL MARKS (8 MARKS)

Outline Marking Scheme

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

PART II (200 Marks)

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

1.	(a)	(i)	Axes	2 @ 2 marks	
			Curves	2 @ 2 marks	8
		(ii)	Equilibrium point	2 marks	
			Explanation	4 marks	6
		(iii)	Two reasons @ 6 marks each		12
	(b)	(i)	Four reasons @ 3 marks each		12
		(ii)	Four explanations @ 3 marks each		12
					[50 marks]

2.	(a)	(i)	Explanation	6 marks	6
		(ii)	Four effects @ 5 marks each		20
	(b)	Three effects @ 8 marks each			24
					[50 marks]

3. Distinguish between each of the following, using examples where appropriate:

(i)	Secured and Unsecured Loans	7 m (4+3) + 6 m (3+3)	13
(ii)	VAT and Capital Acquisition Tax	7 m (4+3) + 6 m (3+3)	13
(iii)	Viable & Non-Viable Farmers	6 m (3+3) + 6 m (3+3)	12
(iv)	Fixed Assets and Current Assets	6 m (3+3) + 6 m (3+3)	12
			[50 marks]

4.	(a)	Two explanations @ 10 marks each (5 + 5)		20
	(b)	Two other sources @ 3 marks each Two explanations: 5 marks + 4 marks		15
	(c)	Three benefits @ 5 marks each		15
				[50 marks]

5.	(a)	Developing country: explanation 10 marks (5 + 5)	10
	(b)	Four economic problems @ 5 marks each (2 + 3)	20
	(c)	Four difficulties @ 5 marks each (2 + 3)	20
			[50 marks]

6.	(a)	(i)	Two uses of budget @ 5 marks each	10 marks	
		(ii)	Total receipts	5 marks	
		(iii)	Net Balance	5 marks	
		(iv)	Explanation	10 marks (5 + 5)	
		(v)	Best month	5 marks	
		(vi)	Most difficult month	5 marks	
					40
	(b)	One option @ 10 marks (5 + 5)			10
					[50 marks]

Agricultural Economics – Ordinary Level – Support Notes

PART I

1. Place in order of importance (1, 2, 3) how each of the following contributes to Irish agricultural output:

Tillage and Horticulture	2	Beef and Milk Production	1	Sheep and Pigs	3

2. The production function is used to describe the relationship between **products** and **factors**.

3. State **two** criteria which may guide farmers in making production decisions.

(i) Habit
(ii) Desire for increased leisure
(iii) Need for enhanced social status
(iv) Reduced risk
(v) Increased sense of achievement
(vi) Profit maximisation.

4. Irish pig producers continue to improve efficiency on their farms. This means that they are now producing **more** meat in **less** time each year.

5. What is the function of **Bord Bia**?

Bord Bia is responsible for the promotion and marketing of Irish food, drink and horticulture. Bord Bia provides a range of services for the small food enterprise sector aimed at assisting them to increase turnover and grow sales including: research; branding; and marketing/promoting.

6. State the payment for the following factors of production:

(i) Capital: Interest

(ii) Labour: Wages/salaries

7. The following figures are from the books of a farm account on 31 December 2010:
Fixed Assets €400,000 Current Assets €150,000 Liquid Assets €60,000 Current Liabilities €30,000.
Using the relevant figures above, calculate the Liquidity Ratio. Show your workings.

Answer: 2 : 1	Workings: 60,000 / 30.000 = 2

8. State **one** economic effect the development of the bio-energy industry in Ireland might have on Irish agriculture.

Savings on fuel costs
Environmental improvement
Improved yield from crops
Income for farmers

9. The Net Worth on a farm balance sheet equals Total Assets minus **Total Liabilities**.

10. The **Consumer Price Index (CPI)** measures changes in the price of goods and services in the economy over time (one year to the next and across a range of years). It is used to calculate the rate of inflation/deflation.

11. State two services provided by Teagasc for Irish Farmers.

Research services; Advisory services; Training/Education services.

12. Complete the food chain for pork in the spaces provided:

Purchased inputs	+	Farmers' own resources	→	Finished pigs	+	Marketing Resources	→	Pork

13. State **two** reasons why farmers prepare farm accounts:

- To find out if they are making a profit or loss
- To find out which sections of the farm are most profitable
- To show to the Revenue Commissioners for tax purposes
- To show bank manager when making loan application.

14. The individual farmer is a price taker. Explain what this means.

Because of the large number of producers in the agricultural industry, the action of an individual farmer cannot affect market prices. No matter how much an individual farmer sells, the price remains the same. The individual farmer is therefore a price taker.

15. Enter the appropriate price elasticity of demand (PED) in each of the spaces provided. (Elastic, unit elastic, or inelastic)

(i)	Elasticity of Milk is –0.3	Inelastic
(ii)	Elasticity of Beef is –1.25	Elastic
(iii)	Elasticity of Wool is –1	Unit Elastic

16. State **one** example of 'joint products' in Irish agriculture.
Lamb and wool; ribs and roast from beef; meal and oil from crops.

17. A 'condition of average' or 'average clause' applies to property insured by farmers. Explain what this means.
If less than the full market value of the property is insured, the amount of compensation that will be paid in the event of a claim will be equal to the proportion insured, e.g., if premises valued at €100,000 is insured for €80,000 against fire and a room valued at €20,000 is burnt out, the compensation will be 80% of €20,000.

18. Fill in the **three** other components (Ps) of the marketing mix in the spaces provided:

PRODUCT	PRICE	**PROMOTION**	**PLACE**

19. State **one** example of an EU directive. **Nitrates Directive; Working Time Directive**

20. State **two** economic effects that the poor weather conditions during the past two winters had on the Irish agricultural sector.

Increased costs for extra feedstuffs / fuel
Damage costs due to burst pipes
Extra Labour costs
Loss of animals

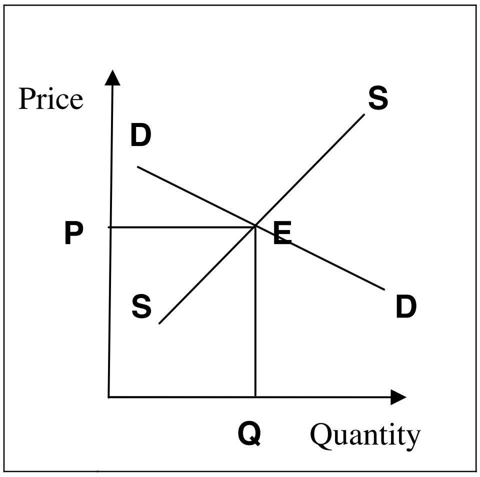
Support Notes
PART II

1. The diagram below shows the market Supply and Demand for an agricultural product.

(a) (i) Copy the diagram into your answer book.

Label the axes and the market Demand and Supply curves.

(ii) Mark in the point of equilibrium and explain what this point means.



The point of equilibrium is **E.**

At the equilibrium price, the quantity supplied and quantity demanded are equal and there is no tendency to change.

(iii) Explain the reasons for the slope of the Demand curve and the Supply curve.

Demand Curve: The higher the price, the lower the demand.

The lower the price, the higher the demand.

Supply Curve: The higher the price, the higher the supply.

The lower the price, the lower the supply.

(b) (i) State **four** reasons for an increase in the demand for any agricultural commodity.

(ii) In **each** case, explain why the demand increases.

	Reasons for increase in demand	**Explanations:**
1	Reduction in price of commodity	More of it can be purchased as unit price is lower
2	Increase in purchasing power of consumer	More money available to buy the product
3	Increase in price of substitutes	Consumers look to alternatives at a better price
4	Change in tastes of consumers	More people buy the product due to increased advertising, health reasons
5	Increase in number of consumers due to sales promotion	Good sales promotion bring the product to the notice of more people, some of whom will buy it.

2. **(a)** (i) Explain the term 'part-time farming'.

(ii) State and explain **two** positive and **two** negative effects of part-time farming on Irish agriculture.

Part time farming:

A situation in which farmers engage in some other regular occupation from which they derive income to enhance their standard of living and/or underwrite their farming activities

Positive effects:

- Extra income for farm families
- Extra funds available for farm development
- Additional labour in the economy, aiding economic growth

Negative effects:

- Less intensive use of land by part time farmers
- Enlargement of farms is impeded
- Reduction in farming population / adverse effect on countryside
- Safety issues with farm animals.

(b) Poor economic conditions affect Irish agriculture in many ways.

State and explain **three** effects of poor economic conditions on farming in Ireland.

- Reduced disposable consumer income means less expenditure on agricultural produce.
- Less capital investment by farmers due to difficulty in obtaining bank credit.
- Limited off-farm employment available.
- Farmers diversifying.
- Increased food and drink exports.

3. Distinguish between **each** of the following, using examples where appropriate:

(a) Unsecured and Secured loans;
(b) VAT and Capital Acquisition Tax;
(c) Viable Farmer and Non-Viable Farmer;
(d) Fixed Assets and Current Assets in a farm Balance Sheet.

(a) An unsecured loan is a loan which is not backed by collateral. The integrity of the borrower would be good enough to satisfy the bank. A good credit rating would be necessary in order to obtain an unsecured loan. Such loans are usually of a short-term nature.

A secured loan is a loan in which the borrower pledges some asset (e.g. car or property) as collateral for the loan. In the event that the borrower defaults, the creditor takes possession of the asset used as security and may sell it to satisfy the debt. Secured loans are the most common form of credit.

(b) VAT – Value Added Tax is an indirect tax on goods and services. It is applied to the value added at each stage of production. Producers and all others who add value to the goods collect the tax and pass on the cost to the next stage of production. It is the final consumer who ultimately pays all the VAT. Some food products do not have any VAT applied.

Capital Acquisition Tax is a financial charge applied by the state on the value of assets or money received as a gift or inheritance. Exemptions and different rates apply depending on circumstances.

(c) Viable farmers are those who are adaptive to changing economic and technical conditions.

Non viable farmers do not have either the ability or the resources to keep their farms modernised

(d) Fixed Assets – assets on the farm for long periods of time, e.g., land, buildings, machinery, breeding livestock.

Current Assets – assets on the farm for short periods of time, e.g. trading livestock, saleable crops, cash.

4. (a) Two direct payments received by farmers are

(i) the Disadvantages Areas Scheme

(ii) the Single Payments Scheme (i.e. Single Farm Payment).

Explain the purpose of **each** of the above payments.

The Disadvantages Areas Scheme (DAS) is an EU payment made to farmers to compensate them for poorer quality land. Their income/profits would be lower than other farmers with better land. The DAS payment would help to bridge the difference.

<u>Areas eligible for DAS</u>
Eligible area can include rough grazing; commonage shares; areas used to grow crops, other than grass, that are used as forage including maize, fodder beet, turnips, mangolds, etc.; and areas used for producing hay or silage.
The land must be used and managed by the applicant. There must be independent access for animals and/or machinery. Access over adjoining landowners land is not acceptable.
There must be appropriate fencing for the farming enterprise. There must be defined external boundaries except in the case of commonage.
<u>Areas ineligible for DAS</u>
Areas under roads, paths, buildings, lakes, areas of bare rock etc.; bogland unfit for grazing; areas used for quarrying; inaccessible areas and areas not available for the rearing of animals under a REPS plan or any other environmental plan; areas used as sports fields, golf courses, pitch and putt courses, etc.

The Single Payments Scheme (Single Farm Payment).

Single Farm Payments: The SFP scheme, which was introduced in 2005, is paid to farmers who farm according to EU environmental and welfare standards (good agricultural practice). It was intended to change the way the EU supported its farm sector by removing the link between subsidies and production of specific crops. It allows farmers the freedom to produce what the market wants. In order for farmers to qualify for payments under the scheme, they have to follow certain conditions and rules. They must meet Cross Compliance standards.

(b) State and explain **two** other sources of income for farmers.

Transfer payments – income from Government, e.g., state pension
Other direct income – investment income, property income, off-farm income

(c) Farmers who own their land and buildings are generally better off than farmers who do not. Outline **three** benefits for farmers of owning their farm.

- They can borrow against the security of their property.
- They do not have to pay rent.
- If the property increases in value over the years, they make a capital gain.
- Some of the property may be sold to finance capital expenditure.
- The earning capacity of the property survives after the farmer's death.

5. **(a)** Explain what is meant by the term ‘developing country’.

A developing country is an economy consisting predominantly of primary industries which are technologically backward, e.g., agriculture and mining, and is very dependent on other countries. The GDP per person is very low and economic development is slow.

(b) Outline **four** economic problems regularly experienced by developing countries.

Low incomes / hardly any savings

Poor educational and health facilities

Lack of skills training

Political corruption / fraud

Over reliance on one or two exports, e.g., coffee, sugar / exported goods not processed.

Overspending on arms

Low prices on international markets.

(c) Explain **four** difficulties that developed countries experience when providing Food Aid to developing countries.

- Expensive for developed countries to implement food aid policy as farmers in donor country must be paid to produce the food. Donor country also must pay for transporting the food.
- Logistical problems in delivering the food due to poor infrastructure / black market.
- Food aid may dislocate commercial trade as an exporting country may feel that commercial markets would exist in some countries if these countries were not getting free food.
- Food aid may dislocate local native production in the developing country. When a country receives free food, there is the risk that it might come to depend on such supplies to the detriment of its own native production.
- Any benefits may be short term as food aid on its own does not teach the developing country’s population how to improve their own food production process.

6. The following is a monthly cash flow budget for a farm for the first 6 months of 2012.

Monthly Cash Flow Budget for a farm: January - June 2012

	January	**February**	**March**	**April**	**May**	**June**	**Total**
	€	€	€	€	€	€	€
Receipts							
Milk	1,000	2,500	8,500	9,000	9,500	10,000	40,500
Calves, cows & cattle		4,000	5,000	5,350	5,700	4,250	24,300
Single Farm Payment	22,400						22,400
A. Total Receipts	**23,400**	**6,500**	**13,500**	**14,350**	**15,200**	**14,250**	**X 87,200**
Payments							
Livestock purchases			4,250		3,000		7,250
Machinery & equipment		30,000				2,750	32,750
Machinery operating exp.	1,100	1,100	1,100	1,100	2,500	3,250	10,150
Feedstuffs	2,500	2,500	2,000	4,000	4,300	4,300	19,600
Electricity	1,100	1,000	600	600	725	800	4,825
Loan repayments	900	900	900	900	900	900	5,400
Household expenses	2,000	2,000	1,600	1,600	1,600	1,650	10,450
B. Total Payments	**7,600**	**37,500**	**10,450**	**8,200**	**13,025**	**13,650**	**90,425**
Net Balance (A – B)	15,800	-31,000	3,050	6,150	2,175	600	**Y** -3,225
Opening Balance	3,500	19,300	-11,700	-8,650	-2,500	-325	3,500
Closing Balance	19,300	-11,700	-8,650	-2,500	-325	275	275

(a) (i) State **two** uses of a cash flow budget for a farmer.

- It enables a farmer to plan ahead financially
- It can test the financial feasibility of the farm
- It can be monitored to see if the plan is working out
- It shows up information on the farm's liquidity
- It can help to monitor deviations and correct them before it is too late.

(ii) Calculate the expected Total Receipts for the first 6 months of 2012 (marked 'X' in the budget). **€87,200**

(iii) Calculate the expected Net Balance for the first 6 months of 2012 (marked 'Y' in the budget). **– € 3,225**

(iv) Explain what the monthly Net Balance figure means for the farm.

The farm plans to spend €3,225 more than it will receive in the six months. It can afford to do so this time as it has just enough in its opening cash. It could not continue this spending for a further six months without making some provision.

(v) State which month will be financially the best for the farm. Explain your answer.

January, due to the receipt of the Single Farm Payment.

(vi) State which month will be financially the most difficult for the farm. Explain your answer.

February, because it is planned to buy machinery and equipment costing €30,000

(b) If the farmer was unable to continue with the loan repayments at the agreed level, outline **one** possible option for the farmer.

- The farmer could ask the lender for a moratorium on the principal and/or interest due. While this would help the farmer in the short term, the term of the loan would get longer and/or the total amount to be repaid would increase.
- Reduction in living expenses
- Sale of some assets.

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