



Coimisiún na Scrúduithe Stáit State Examinations Commission

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Scrúduithe Ardteistiméireachta, 2005

*Eacnamaíocht
Talmhaíochta*

Ardleibhéal

Marking Scheme

Leaving Certificate Examination, 2005

*Agricultural
Economics*

Higher level

Leaving Certificate Examination 2005

Higher Level Agricultural Economics

MARKING SCHEME

and

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.
- Words, expressions or statements separated by solidus (/) are alternatives, which are equally acceptable.
- 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-HIGHER LEVEL

STRUCTURE	Two Parts:	1 and 11
	Part 1	20 Questions-120 Marks
	Part 11	6 Questions-200 Marks

OUTLINE MARKING SCHEME

PART 1 Answer **15** questions (15x8 = 120 marks)

(1) 4x 2	(2) 4+ 2x2	(3) 1x8	(4)1x8	(5)2x4
(6) 1x8	(7) 2x4	(8) 2x4	(9) 1x8	(10)1x8
(11) 1x8	(12) 1x8	(13) 1x8	(14) 2x4	(15) 2x4
(16)2x4	(17) 2x4	(18) 1x8	(19) 1x8	(20) 2x4

PART 11 Answer **4** questions (4x50=200 marks)

Question 1 (a) 4x10	(b) 10			
Question 2 (a) 24	(b) 16	(c) 10		
Question 3 (a) 5x10				
Question 4 (a) 20	(b) 10	(c) 10	(d) 10	
Question 5 (a) 14	(b) 9	(c) 10	(d) 8	(e) 9
Question 6 (a) 30	(b) 20			

STATE EXAMINATIONS COMMISSION
LEAVING CERTIFICATE EXAMINATION 2005
AGRICULTURAL ECONOMICS – HIGHER LEVEL
(320 MARKS)

PART I (120 MARKS)

ALL QUESTIONS CARRY EQUAL MARKS (8 MARKS)

1. Factor 2 Marks
Goods 2 Marks
Services 2 Marks
Product 2 Marks

2. An Imputed Cost is a cost that is calculated but no actual payment is made
4 Marks

Example I Family Labour
Example II Family Capital
Any Two 2 x 2 Marks

3. Price of a commodity is determined by the interaction of supply and demand.
8 Marks

4. Exports are worth more because of export subsidies paid on exports to non-EU countries

Or

The impact of agricultural exports is low relative to non-agricultural exports.
8 Marks

5. (i) Low Fat and Solids-Not-Fat in milk.
(ii) High assembly, processing, storage and distribution costs
(iii) Poor-Product mix.
Any Two 2 x 4 Marks

6. The Demand Curve is a horizontal straight line or infinitely elastic/ no matter how much the individual farmer sells, the price received remains the same. 8 Marks

7. Marginal Revenue Product (M.R.P) equals Marginal Physical Product multiplied by Price of the Product. 2 X 4 Marks

8. (i) Large number of relatively small producers.
(ii) Geographical dispersal of farming over a wide area.
(iii) Supply tends to vary seasonally and from year to year.
(iv) Bulky and Perishable nature of agricultural products.
(v) Over-supply on international markets Any Two 2 x 4 Marks

9. (i) Labour - Family / Permanent - Fixed Cost
- Hired / Casual - Variable Cost
(ii) Machinery Costs- Owned - Fixed Cost
- Hired / Leased - Variable Cost
Any One 8 Marks

10. Annual Rate of growth of demand for Food = 1% 8 Marks

11. (i) If stocks at the end of the year are overvalued or stocks at the beginning of the year are undervalued, output and income will be increased.
(ii) If stocks at the end of the year are undervalued or stocks at the beginning of the year are overvalued, output and income will be decreased.
Any One 8 Marks

12. The “Condition of Average” in insurance means that if less than the full market value of the property is insured, the amount of compensation paid will be equal to the proportion insured. 8 Marks

13. “Real Rate of Interest” is the interest rate adjusted for inflation.
or
Nominal Rate of Interest less Inflation Rate. 8 Marks

14. Partial Budget – Changes under consideration affect a part of the farm. 4 Marks

Complete Budget – Used when a farmer takes over a new farm. 4 Marks

15. Labour 4 Marks
Capital 4 Marks

16. (i) Ability to borrow money against the security of the property.
(ii) Ability to sell some of the property.
(iii) Possibility of capital gains.
(iv) Earning capacity of the property will survive the death of the owner.

Any Two 2 x 4 Marks
17. (i) Changes in the Resource-Mix
(ii) Changes in the Enterprise-Mix
(iii) Changes in the Average Area Per Farm

Any Two 2 x 4 Marks
18. Decoupled Payments are not linked to production 8 Marks
19. Rural Environmental Protection Scheme
or
Payments to Farmers to Farm in an environmentally friendly manner

8 Marks
20. Roles of farmers in modern economies
(i) Supply good quality food
(ii) Preserving the environment
(iii) Reduction in supply

2 x 4 Marks

PART II (200 MARKS)

1. (a) Beef Processing and Marketing in Ireland
(I) Ownership of processing capacity controlled predominantly by **private companies.**

Export Market Processors	85%
Domestic Market Processors	15%

10Marks graded

- (II) Main Markets (2004):

Home	10%
UK	48%
EU	31%
Rest of World	11%

10Marks graded

- (III) Seasonality of Production:

Pronounced seasonality with most (65%) slaughterings in the Autumn because production is based on grass with most calvings in the spring about 30 months previously.

10Marks graded

- (IV) Influence of the CAP

Decoupling of Direct Payments

- Consequences (i) Production Decrease
(ii) Price Increase
(iii) Market Price signals production

10Marks graded

- (b) Farmers concerns about the performance of beef industry:
(i) Low prices in relation to markets due to inefficiencies and poor marketing at factory level.
(ii) Too much emphasis on selling carcasses rather than meat cuts/
not enough emphasis on value added

10Marks graded

[50 Marks]

2. (a) (i) Consumer Price Index – Measures the change over time in the prices of a comprehensive set of consumer goods and services. 8 Marks

- (ii) Real Price Index = $\frac{\text{Agricultural Output Price Index}}{\text{consumer price index}}$ 8 Marks

Or

When the agricultural Output Price Index is adjusted for movements in the general price level.

8 Marks

- (iii) Farmers Terms of Trade = $\frac{\text{Agricultural Output Price Index}}{\text{Agricultural Input Price Index}}$ is divided by the Agricultural Input Price Index 8 Marks

Or

Describes how prices received by farmers for their output are moving in relation to the prices they must pay for inputs.

8 Marks

(b)

(i) **Real Price Index** = $\frac{\text{A.O.P.I.} \times 100}{\text{C.P.I.}}$
= $\frac{90 \times 100}{150} = 60\%$ 4 Marks

$100 - 60 = 40\%$ 4 Marks

(ii) **Terms of Trade** = $\frac{\text{A.O.P.I.} \times 100}{\text{A.I.P.I.}}$
= $\frac{90 \times 100}{100} = 90\%$ 4 Marks

$100 - 90 = 10\%$ 4 Marks

(c) Reasons for increase in average real farm incomes per worker

(i) Number of farm workers has decreased.

(ii) Increase in direct income support.

2 x 5 Marks graded

[50 Marks]

3.	(i)	Farm Output = Sales less purchases	= €200,000	2 Marks
		+ Increase in inventories	= € 5,000	2 Marks
		+ Household consumption	<u>= € 1,000</u>	2 Marks
			€ 206,000	4Marks

	(ii)	Farm Gross Margin = Farm Output	= €206,000	3 Marks
		Less variable costs	<u>= € 30,000</u>	3 Marks
			€176,000	4 Marks

	(iii)	Family Farm Income =		
		Farm Gross Margin	= €176,000	2 Marks
		Less fixed costs	<u>= € 36,000</u>	4 Marks
			€140,000	4 Marks

Or

		Family Farm Income =		
		Farm Output	= €206,000	2 Marks
		Less Variable Costs	= € 30,000	2 Marks
		Less fixed costs	<u>= € 36,000</u>	4 Marks
			€140,000	2 Marks

	(iv)	Investment Income = Family Farm Income	= €140,000	3 Marks
		less imputed wages	<u>= € 20,000</u>	3 Marks
			€ 120,000	4 Marks

	(v)	Profit = Farm Output	= €206,000	2 Marks
		Less fixed + variables costs	= € 66,000	2 Marks
		Less imputed costs	<u>= € 50,000</u>	2 Marks
			€ 90,000	4 Marks

Or

		Profit = Family farm income	= €140,000	4 Marks
		Less imputed costs	<u>= € 50,000</u>	2 Marks
			€ 90,000	4 Marks

[50 Marks]

4. (a) Diagram 20 Marks graded
- (b) Demand for land derives from the contribution it is expected to make to production when combined with other resources. 10 Marks graded
- (c) On diagram – A shift to the left of D_1D_1 by means of D_2D_2 , which results in a decrease in the price of land. 4 Marks

Explanation – A decrease in the price of agricultural output results in less production of output leading to less demand for land to produce the output.

6 Marks

- (d) Reasons for increase in demand for land
- (i) Extra demand from non-farmers because of “Celtic Tiger”.
 - (ii) Population growth/extra demand for infrastructure/roads, houses etc.
 - (iii) Extra demand from farmers to increase holdings to a viable size.

Any Two 2 x 5 Marks (graded)

[50 Marks]

5. (a) Construction of Supply Curve 14 Marks graded
- (b) Definition of Price Elasticity of Supply is

$$\frac{\% \text{ change in the quantity of a commodity supplied}}{\% \text{ change in the price of that commodity}}$$

Or

The responsiveness of supply to alternate price changes

Or

The percentage change in supply, which will result from a 1% change in the price of the commodity

Any one 9 Marks

(c) Price Elasticity of Supply

$$= \frac{\% \text{ Change in Supply (340} \rightarrow \text{360)}}{\% \text{ Change in Price (€70} \rightarrow \text{€80)}}$$

$$\left[\frac{+20}{\frac{1}{2}(340+360)} \times \frac{100}{1} \right] \div \left[\frac{+10}{\frac{1}{2}(70+80)} \times \frac{100}{1} \right]$$

$$= \frac{20}{350} \times \frac{100}{1} \times \frac{75}{100} \times \frac{1}{100} = \frac{150}{350} = \frac{3}{7} = 0.43$$

10 Marks

(d) Price Elasticity of Supply is inelastic because it is less than unit elasticity /because the supply response is less than the change in price.

Or

if there is a 1% change in price there is only a 0.43% change in supply

8 Marks graded

- (e)
- (i) Costs of production of wheat
 - (ii) Costs of production of related commodities e.g. barley
 - (iii) Technology progress and husbandry improvement
 - (iv) Environmental Variables – e.g. Weather
 - (v) Price of related commodities e.g. Barley
- Any 3 x 3 Marks graded

[50 Marks]

6. (a) (i) Mac Sharry Reforms – Impact on Irish Farming
- Increase in direct income payments – e.g. Headage payments, Area Aid
 - Lower Prices / Cut in intervention prices/Cut in export subsidies
 - More equitable distribution of income
 - Introduction of accompanying measures e.g. R.E.P.S
 - Less intensive farming e.g. increase in organic farming
 - Extension of quotas

15Marks graded

(ii) Uruguay Round Trade Agreement

- Reduction in total government payment to agriculture
- Reduction in price support
- Liberalisation of trade in agricultural products – e.g. lowering import levies
- Lower Export Subsidies
- Reduction in intervention

15 Marks graded

(iii) Agenda 2000

- Decoupling of Direct Payments
- Modulation Funds for Rural Development e.g. REPS, forestry, crafts, organic crops, forestry
- Final reduction in price support for cereals e.g. increase in Area Aid
- Rural development and environment policy grants for the development of rural industries

15 Marks graded

(b) Probable effects on Irish Agriculture of the Enlargement of the EU

- Bigger export markets
- Source of labour
- More investment opportunities
- Less rural development funds
- More competition

Any Two 2 x 10 Marks graded

[50 Marks]