



**Coimisiún na Scrúduithe Stáit**  
**State Examinations Commission**

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*Eacnamaíocht*  
*Talmhaíochta*

*Ardleibhéal*

*Marking Scheme*

*Leaving Certificate Examination, 2003*

*Agricultural*  
*Economics*

*Higher Level*

**Leaving Certificate Examination 2003**

# **Higher Level Agricultural Economics**

<p><b>MARKING SCHEME and NOTES for use with the Marking Scheme</b></p>
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- There is no suggestion that the enclosed notes are exhaustive or definitively complete. They are not model or suggested answers.
- Further relevant points presented by candidates will be 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.

**STATE EXAMINATIONS COMMISSION**  
**LEAVING CERTIFICATE EXAMINATION 2003**  
**AGRICULTURAL ECONOMICS - HIGHER LEVEL**  
**MARKING SCHEME**

**PART 1 (120 MARKS)**

1. (a) Shortage → Prices ↑ → Demand ↓ → Supply ↑  
**OR**  
(b) Surplus → Prices ↓ → Demand ↑ → Supply ↓ **8 MARKS**

**2. Capital Formation** is the additional land improvements, buildings, breeding stock, machinery and equipment.

**OR**

The stock of capital in farming is increasing over time, stating two examples.

**8 MARKS**

**3.** Estimates contain an element of personal borrowings, which cannot be quantified.

**OR**

Estimates need to be adjusted for monies received by farmers in interest bearing accounts.

**8 MARKS**

**4.** The low **responsiveness** of farm production to price change is due to the low mobility of resources into and out of farming. **8 MARKS**

**5.** The demand **curve** facing an individual farmer is a horizontal straight line.

**4 MARKS**

No matter how much the individual sells, the price remains the same.

**OR** The demand curve is infinitely price elastic/ farmers are price takers.

**Any ONE 4 MARKS**

**6. Opportunity cost** is the earnings (OR revenue foregone) in the next best acceptable employment. **4 MARKS**

EXAMPLE – Industrial wage OR earnings off-farm.

**4 MARKS**

**7. Milk Production in Ireland** is seasonal because of spring calving and dependence on grass-growth. **4 MARKS**

DISADVANTAGES: I) under-utilization of processing capacity  
II) under-utilization of labour  
III) extra storage costs  
IV) continuous production of short-life dairy products is constrained. **ANY ONE 4 MARKS**

**8.** I) Family labour II) Family Capital **2 X 4 MARKS**

**9. Real interest rates** are nominal interest rates, which have been adjusted for inflation. **8 MARKS**

**10. Non-cash items** in the calculation of family farm income include:-  
i) changes in inventories  
ii) household consumption of own farm produce  
iii) depreciation **ANY TWO 2 X 4 MARKS**

**11. Price cost squeeze** is the tendency over time for the price of inputs to increase more rapidly (or fall more slowly) than product prices. **8 MARKS**

**12. Indirect effects** of growth in farm output: -  
i) growth in the purchasing of agricultural inputs **4 MARKS**  
ii) growth in processing or distribution of agricultural products **4 MARKS**

**13. Repayment of VAT on farm inputs:**  
i) VAT rebate on farm product sales **4 MARKS**  
ii) Farmer may register in order that all the VAT on inputs is repaid **4 MARKS**

**14. Productivity ratios** may give misleading results because they ignore many inputs involved in production **8 MARKS**  
**OR** because they have not been adjusted over time for inflation

**15. Variable import levies** move in the opposite direction to the import price,  
**4 MARKS**

So that a product cannot enter below a minimum price, no matter how cheap it is on external markets.  
**4 MARKS**

**16.** A farmer receives a lower price for output above his/her quota **4 MARKS**

The price is reduced in successive stages or **tiers** until at very high levels of production a very low price is paid.  
**4 MARKS**

**17.** The **marginal revenue product** is the contribution of each extra unit of resource.  
**OR** Extra income flow per unit of input **OR Marginal Product** multiplied by the **Price of the product.** **8 MARKS**

**18. Two powers of the European parliament: -**

- i) tables questions to the Commission
- ii) removes the Commission
- iii) limited say in relation to the EU budget
- iv) final say on none obligatory policies

**ANY TWO 2 X 4 MARKS**

**19. Amount of export refunds** = surplus multiplied by the difference between the intervention price and the world market price.  
**8 MARKS**

**20. Mansholt Plan** proposed a programme of highly selective investment subsidies to enable potentially viable farmers to become viable,  
**4 MARKS**

And these would be accompanied by incentives to non-viable farmers to retire.  
**4 MARKS**

**STATE EXAMINATIONS COMMISSION**

**LEAVING CERTIFICATE EXAMINATION 2003**

**AGRICULTURAL ECONOMICS - HIGHER LEVEL**

**MARKING SCHEME**

**PART II**

**QUESTION 1**

**a) I) Post farm-gate sectors of the food chain**

- processing
- distribution
- imports / exports

**ANY TWO 2 X 5 MARKS**

**II) Price increases in post farm-gate sectors**

- increase in cost of raw materials
- increase in wages and salaries
- increase in processing costs, e.g. energy
- increase in price of imports

**ANY TWO 2 X 5 MARKS GRADED**

b) I) Farm-gate price as % of retail price (2000)	42.75	<b>5 MARKS</b>
Post farm-gate prices as % of retail price (2000)	71.50	<b>5 MARKS</b>
Total Retail Price	114.25	<b>5 MARKS</b>
Food Prices at Retail Level	+14.25 %	<b>5 MARKS</b>

**II) Improvements in outcomes for farmers:**

- i) Higher farm-gate prices
- ii) Lower price increases in post farm-gate sectors
- iii) Reduction in levies imports

**ANY ONE 10 MARKS**

**[50 Marks]**

QUESTION 2

- a) Supply curve ON DIAGRAM 18 MARKS  
Demand curve
- b) SURPLUS: 300,000 tonnes 12 MARKS
- c) **Cost of disposal:**  $300,000 \times (€120 - €70)$  10 MARKS  
 $300,000 \times €50$   
 $€15,000,000$
- d) Quota = 200,000 tonnes 5 MARKS
- e) Supply Curve for Quota ON DIAGRAM 5 MARKS
- [50 Marks]

QUESTION 3

a) Resource **mobility as an economic issue:**

If resources cannot move freely from one use to another as economic circumstances change, then resources may be employed in sub-optimal ways, **OR** there may be less efficient utilization of resources.

10 MARKS

- b) i) **Labour - mobility** depends on the category of labour 4 MARKS

**Farm employees** - very mobile if income is adequate 4 MARKS

**Family relatives - mobile** depending on income OR family circumstances 4 MARKS

**Farmers - limited** mobility because of:

unwillingness to do off-farm work

OR non-availability of off-farm employment in the locality

OR inability to do non-farm work

ANY ONE 4 MARKS

- ii) Land - movement into farming by reclamation 4 MARKS  
- movement out of farming restricted by limited alternative uses 4 MARKS

- iii) Capital - movement into farming depends on returns **4 MARKS**  
- movement out of farming depends on its rate of depreciation **4 MARKS**

**Land and buildings** - depreciation is slow **4 MARKS**

**Machinery and Equipment** – wears out rapidly  
**OR Breeding stock** - can be readily run down **4 MARKS**

**[50 Marks]**

#### QUESTION 4

- a) **“Adjustment”** means the re-organisation of existing resources.

**10 MARKS**

Explanation by means of examples

- i) Changes in resource-mix
- ii) Changes in enterprise-mix
- iii) Changes in farm-size

**ANY TWO 2 X 5 MARKS**

- b) **FORCES - Economic** – differential demand for luxury goods and food **10 MARKS**

- change in demand within the food group **10 MARKS**

**-Technological** - substitution of capital for labour enables farmers to  
operate larger farms **5 MARKS**

Facilitated by early retirement of farmers  
and/or mobility of operators between farms  
and/or between farming and non-farming

**5 MARKS**

**[50 Marks]**



QUESTION 5

a) i)

Quarter	1	2	3	4	5	6	7	8
Payments/Outlays	4	3	2	5	8	2	4	5
Receipts	1	4	3	2	3	6	4	2
Balance	-3	1	1	-3	-5	4	0	-3
Cumulative Balance	-3	-2	-1	-4	-9	-5	-5	-8

**16 MARKS**

**Maximum Bank Overdraft = € 90,000**

**4 MARKS**

ii) Reasons for non-qualification for a bank overdraft:

The overdraft is not cleared at any time during the eight quarters

**OR** The negative balance has increased over the eight quarters

**6 MARKS**

b) **Types of farm budgets**

i) **Partial budgets**

**2 MARKS**

**Function** - the farmer wishes to find out whether or not some alteration in his/her farming system can be brought about which will raise his/her income

**5 MARKS**

ii) **Complete budgets**

**2 MARKS**

**Function** - used for the purpose of deciding on the most suitable plan or combination of enterprises for a farmer who is starting from scratch

**5 MARKS**

iii) **Capital budgets**

a) cash flow

**1 MARK**

b) investment appraisal

**1 MARK**

**Function - a)** to determine if the funds are available to enable the plan to be carried out /financial feasibility

**4 MARKS**

c) to determine the economic returns to the investment in the plan/profitability

**4 MARKS**

**[50 Marks]**

QUESTION 6

a) **CALCULATION OF INCOME GAP:**

**Average Industrial Wage** €25,000

$$\begin{aligned}\text{Farm income per Family Worker} &= \frac{\text{€ 2,000,000,000}}{110,000} \\ &= \text{€ 18,182}\end{aligned}$$

**10 MARKS**

$$\begin{aligned}\text{Income Gap - Absolute} &= \text{€25,000} - \text{€18,182} \\ &= \text{€ 6,818}\end{aligned}$$

**5 MARKS**

$$\begin{aligned}\text{Percentage} &= \frac{\text{€6,818}}{\text{€25000}} = 27\%\end{aligned}$$

**5 MARKS**

b) **Limitations involved in comparing the absolute income levels**

i) Valuation of own farm produce consumed in farm household  
Retail Value V Wholesale value

ii) Increase in non-farming income coming into households

iii) Farmers who are major property owners are better off than people on the same income who do not own property

iv) Tax burden: PAYE V Self – Employed

**(ANY 2 X 10 MARKS)**

**j) Alternative way of assessing the income position of Farmers:**

Comparison of Relative Income Movements over time:

The comparison of farmers' income over time relative to the incomes of other groups in society. **5 MARKS**

This method lessons the pitfalls involved in the comparison of absolute income levels i.e. non-farm household income/the possession of wealth/ precise measurement of the farm workforce.

**5 MARKS**

**[50 Marks]**