Coimisiún na Scrúduithe Stáit

State Examinations Commission

Scéimeanna Marcála	Scrúduithe Ardteistiméireachta, 2007
Eacnamaíocht Talmhaíochta	**Ardleibhéal**

Marking Scheme	Leaving Certificate Examination, 2007
Agricultural Economics	**Higher Level**

Coimisiún na Scrúduithe Stáit
State Examinations Commission

LEAVING CERTIFICATE AGRICULTURAL ECONOMICS

HIGHER LEVEL

MARKING SCHEME

Leaving Certificate Examination 2007

Higher Level

Agricultural Economics

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.

STATE EXAMINATION COMMISSION

AGRICULTURAL ECONOMICS – HIGHER LEVEL

OUTLINE OF MARKING SCHEME

PART ONE (120 MARKS)

Q1. 1 X 8 marks	Q2. 1 X 8 marks	Q3. 1 X 8 marks	Q4. 1 X 8 marks
Q5. 1 X 8 marks	Q6. 1 X 8 marks	Q7. 1 X 8 marks	Q8. 1 X 8 marks
Q9. 1 X 8 marks	Q10. 1 X 8 marks	Q11. 1 X 8 marks	Q12. 2 X 4 marks
Q13. 1 X 8 marks	Q14. 2 X 4 marks	Q 15 2 X 4 marks	Q16. 2 X 4 marks
Q17. 2 X 4 marks	Q18. 2 X 4 marks	Q19. 2 X 4 marks	Q20. 1 X 8 marks

PART TWO (200 MARKS)

Question 1.	**(a)**	5 + 5 + 6 + 6 marks graded.
	(b)	3 X 4 marks graded.
	(c)	4X 4 marks graded.
Question 2.	**(a)**	3X10 marks graded
	(b)	2 X 5 marks graded
	(c)	2 X 5 marks graded
Question 3.	**(a)**	4 X 6 marks graded.
	(b)	3 X 6 marks graded.
	(c)	8 marks graded.
Question 4.	**(a)**	18 marks graded.
	(b)	16 marks graded.
	(c)	16 marks graded.
Question 5.	**(a)**	3 X 14 marks graded.
	(b)	1 X 8 marks graded.
Question 6.	**(a)**	(i) 2 X 6 marks graded + (ii) 2 X 6 marks graded.
	(b)	2 X 5 marks graded.
	(c)	2 X 4 marks graded + 2 X 4 marks graded.

AGRICULTURAL ECONOMICS 2007-07
HIGHER LEVEL
MARKING SCHEME AND SUPPORT NOTES

PART I (120 Marks)

Answer **fifteen** questions.

All questions carry equal marks.

1. The increase in value at each stage in the marketing process
i.e. Farm-gate price → carcass value – beef cuts – vacuum packs in supermarkets
In relation to beef, it relates to additional revenue earned through processing, merchandising, branding etc. of beef e.g. stir-fried beef.

8 MARKS

2. Census of population is a blunt instrument for collecting labour information as it is self-administered.
Questions are kept simple so as to remove any errors on completion.

8 MARKS

3. The stock of capital in farming, other than land, is increased over time by the process of capital formation. This is defined as additional land improvement, buildings, breeding stock, machinery and equipment.

8 MARKS

4. When the material and service inputs are deducted from gross agricultural output, we obtain Gross Agricultural Product at market price (GAP $_{MP}$).

8 MARKS

5. Management is that factor of production, which organizes the other factors of production to produce goods and services.

8 MARKS

6. The agricultural industry is made up of a large number of producers - the actions of any individual farmer cannot affect market prices and farmers are therefore described as price takers. The demand curve facing the individual farmer is a horizontal straight line, which is infinitely price elastic.

8 MARKS

7. Discounting considers the time value of money.
A current receipt or outlay of money is not the same as a receipt or outlay of money in the future because of (i) inflation, (ii) interest earned on money received now.

8 MARKS

8. Diminishing returns explains the relationship between inputs and outputs. Output levels change as input levels change. As the level of inputs used increases, output increases but at a decreasing rate.

8 MARKS

9. Payments for which no factor of production has been provided in return e.g. dole etc.

8 MARKS

10. The demand for one good moves in line with its complement e.g. bread and butter. If the price of bread increases, demand for bread declines, demand for butter also declines.

8 MARKS

11. Supply shift from period to period
Demand for potatoes is price inelastic — Any one point 8 MARKS

GDP	3%
Labour Force	7%

8 MARKS

13. The income elasticity of demand for food declines as real incomes rise. As income levels rise, people spend a smaller proportion of their income on necessity goods and spend greater amounts on luxury goods. Engels Law.

8 MARKS

14
- (i) Employment / Job losses
- (ii) Increase in imports or decrease in exports.
- (iii) Less income for farmers / reduction in profits.
- (iv) Less business for road hauliers.
- (v) Extra government spending on social welfare payments.
- (vi) Reduction in economic growth.

Any 2 X 4 MARKS

15.

The Real Price Index	**Farmers' Terms of Trade**
$= \frac{AOPI}{CPI} = \frac{209}{186.4} \times 100 = 1.1212 \times 100 = 112.12$	$= \frac{AOPI}{AIP} = \frac{209}{235.2} \times 100 = 0.8886 \times 100 = 88.86$

2 X 4 MARKS

16.
- (i) Instability of agricultural prices.
- (ii) Guarantee minimum income for farmers.
- (iii) Guarantee regular supplies / ensure food independence.

ANY 2 X 4 MARKS

17.
- (i) Increase in production costs on farms / decrease in farm incomes or standard of living.
- (ii) Increase in processing and distribution costs.
- (iii) Reduction in supply of agricultural products.
- (iv) Economies of scale / Growth in large firms due to economies.

ANY 2 X 4 MARKS

18. (i) Diversification.
(ii) Selecting enterprises with stable prices – producing milk rather than beef
(iii) Forming contracts with purchasers.
(iv) Insurance.
(v) Discount the future at a high rate.

ANY 2 X 4 MARKS

19. (i) Changes in resource mix involving the substitution of capital for labour.
(ii) Changes in the enterprise mix.
(iii) Increase in average area of farms

ANY 2 X 4 MARKS

20. (i) Involves valuing family labour and capital at the going rate.
(ii) No actual payment made for the resource factor e.g. family labour and capital

8 MARKS

AGRICULTURAL ECONOMICS 2007
HIGHER LEVEL

MARKING SCHEME AND SUPPORT NOTES

PART II (200 Marks)

QUESTION ONE

a) **Households** – own all the resources or factors of production e.g. land, labour etc. The primary function of households is consumption and they offer their resources to firms provided the payment they receive in return is acceptable.

5 MARKS GRADED

Firms – centres of all production and they buy resources from the households to produce goods and services.
The primary function of firms is to buy resources and to produce foods and services.

5 MARKS GRADED

Factor Market – demand for resources from the firms interacts with the supply of resources from households to give prices e.g. wages, interest rates, land rents and interest rates.

6 MARKS GRADED
(3+3 Marks)

Product Market – demand for goods and services from the household interacts with the supply of goods and services from the firms resulting in prices such as cattle prices, car prices etc..

6 MARKS GRADED
(3+3 Marks)

b) **Limitations of the diagram as a means of representing the economic system**

(i) Ignores the role of the government in the economy

(ii) Ignores the chain of marketing activities that lies between the households and firms

(iii) Does not recognise the existence of intermediate firms which produce goods and services for other firms rather than for households e.g. fertiliser firms.

(iv) Overlooks the fact that many firms, such as the family farm, own resources as well as purchase them

ANY 3 X 4 MARKS GRADED

c) **Criteria which influence a farmer when deciding what to produce on the farm.**

(i) Suitability of farm e.g. soil.
(ii) Availability of markets / consumer tastes and preferences.
(iii) Costs of production / cost of related commodities.
(iv) Expected price / price of related commodities.
(v) Personal preference.
(vi) Environmental variables.

ANY 4 X 4 MARKS GRADED
(2+2 Marks)

QUESTION TWO

a) **Partial Budgets** – are made when the changes under consideration affect only a part of the farm business.

Used when a farmer wishes to find out whether or not some alteration in his farming system can be brought about which will raise his income.

Partial budget examines additional costs and additional income associated with change. Only looks at cost/benefits associated with actual change. It does not examine entire farm.

Example – a farmer tries to find out if some alteration in his farming system would raise his income / examine the cost benefits associated with the change.

10 MARKS GRADED

Complete budgets – are used for the purpose of deciding on the most suitable combination of enterprises for a farm.

A complete budget involves listing the enterprises which are to be considered on the basis of their gross margins to select the preferred combination. If the estimated income from this plan is considered inadequate, the plan is revised by including more of the higher income enterprises and less of the lower ones.

Example – a farmer is taking a farm from scratch and tries to create a plan which will provide an acceptable income.

10 MARKS GRADED

Capital budgets – are used to test the feasibility and profitability of a farm plan.

After a partial or complete budge has been made, a capital budget may be drawn up to test the financial feasibility and profitability of the plan.

Example – having prepared a partial or capital budget, a farmer tries to determine if he has sufficient funds to implement the budget and the adequacy of the economic returns to the investment.

10 MARKS GRADED

b) Decoupling

Effects on cash flow budgeting.

- (i) Single farm payments are paid as an annual sum rather than numerous payments over the year.
- (ii) Possible reduction in costs of production.
- (iii) Income is guaranteed
- (iv) Loan repayments – Monthly basis or one annual payment on loan
- (v) May require adjustment of bank overdraft.

ANY 2 X 5 MARKS GRADED

c) Benefits to farmers of carrying out comparative analysis:

Comparative analysis – productivity ratios of a farm are compared with averages from similar farms in the same district or region/test of farm efficiency.

- (i) Identifies the strong and weak enterprises on a farm relative to other farms.
- (ii) Establishes the reasons for the variation in performance of the different enterprises on the farm.
- (iii) Suggests possible solutions to enhance the performance of the 'weak' enterprises.
- (iv) Compares profit and loss on similar farms of similar size in the same region.
- (v) Provides basic information for formulating plans for the future.

ANY 2 X 5 MARKS GRADED

TOTAL: 50 MARKS

QUESTION THREE

a) Characteristics of Irish Farming that can limit successful marketing

- (i) Large number of relatively small units (i.e. farms) / structure of Irish Farming.
- (ii) Geographical dispersal of farming over a wide area.
- (iii) Supply of products tends to vary seasonally and from year to year / supply is variable and demand is uniform, hence price variation.
- (iv) Bulky and perishable nature of food products / nature of food products.
- (v) Dependence on international markets.
- (vi) Infrastructural bottlenecks.

ANY 4 X 6 MARKS GRADED

b) Benefits of membership of a co-operative for a farmer

- (i) Provides an outlet for production.
- (ii) More competitive input prices.
- (iii) Extended control over the business.
- (iv) Has an input into the decision-making process of the organisation/ higher bargaining power.
- (v) Shares in profits of co-op.

ANY 3 X 6 MARKS GRADED

c) Why farmers may dislike vertical integration within agricultural marketing.

Reason – It may give too much control over farm production to people outside of farming and the farmer may become a mere employee

8 MARKS GRADED

TOTAL: 50 MARKS

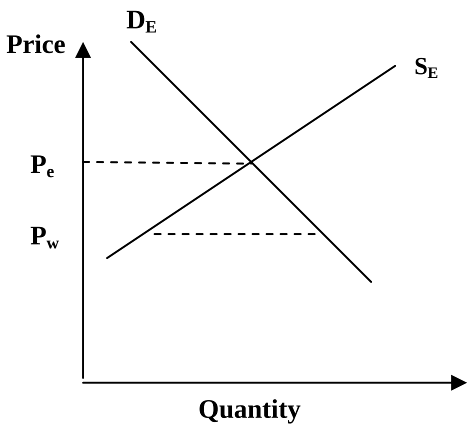
QUESTION FOUR

a) Labelling

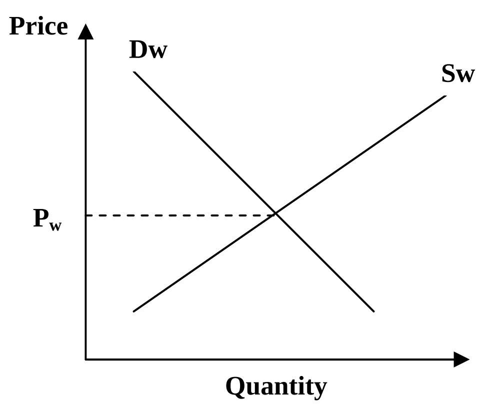
(i)	Axes	(Price and Quantity)	4 X 1 MARKS
(ii)	Curves	(Supply curves (S_1 & S_2)	
		(Demand Curves (D_1 & D_2)	4 x 2 MARKS
(iii)	Equilibrium prices		2 x 3 MARKS

b) Supply curve would shift to right while demand curve would remain unchanged. Fall in price while greater quantity demanded.

E.U. MARKET



WORLD MARKET



If free trade policy was introduced into the EU, producer prices would decline from PE to Pw.

DIAGRAMS 1 X 6 MARKS

EXPLANATION 10 MARKS GRADED

c) Effects of the introduction of import levies

(i) EU farmers - Increase in producer prices. 4 MARKS GRADED

- Increase in supply of farm products. 4 MARKS GRADED

(ii) Consumers

(i) Increase in food prices / imported products sold at imported prices + levies

(ii) Decline in demand for food products.

(iii) Limited consumer choice as levy may deter imports / consumers have to buy EU produced goods.

ANY 2 X 4 MARKS GRADED

TOTAL: 50 MARKS

QUESTION FIVE

a) **Net worth** – the difference between the total assets and liabilities or the total net investment in the business. Tells us how much farmer has invested in the business.

Net present value – present value of income to be earned in the future / takes account of the effect of time on investment.

b) **Demand Pull Inflation** – an increase in the level of demand without a corresponding increase in supply leaves an unsatisfied demand at existing prices. Suppliers can increase their profits by raising their selling prices, leading to inflation.

Cost Push Inflation – when the owners of factors in the economy are able to force up the price of these resources. Increasing costs are pushing up selling prices/ An increase in selling price results from an increase in the price of factors of production, for reasons other than excess demand.

c) **Financial Feasibility** – refers to the availability of funds to enable a farm plan to be carried out/ feasibility is established by cash-flow budgets.

Profitability – refers to the economic returns to the investment in a farm / Profitability is established by investment appraisal.

d) **Milk quota at farm level** – Milk quota represents a constraint on the quantity of output a producer can produce. A farmer receives a higher price for output within quota and a lower price for output in excess of quota

Super levy –The Super levy system was introduced to control milk supply. For output in excess of quota a levy or penalty is charged which has the effect of lowering severely the price received for excess milk.

FIRST THREE CORRECT 3 X 14 MARKS GRADED
FOURTH CORRECT 1 X 8 MARKS GRADED

TOTAL: 50 MARKS

QUESTION SIX

(a) (i) Roles / function of the European Commission.

The commission is responsible for proposing legislation, implementing decisions, upholding the Union's treaties.

(i) The Commission can make formal proposals for legislation.
(ii) Once legislation is passed, it is the Commission's responsibility to ensure it is implemented, by member states or through the agencies of the European Union.
(iii) The Commission is responsible for the implementation of the EU budget, ensuring that EU funds are correctly spent.
(iv) It is responsible for negotiating international trade agreements, such as within the World Trade Organisation.

ANY 2 X 6 MARKS GRADED

(ii) Roles / functions of the European Parliament

(i) Has the power to table questions for the Commission to answer.
(ii) Has to be consulted by the Council of Ministers on most legislative proposals but no obligation on anyone to accept its advice.
(iii) Has the power to remove the commission by a two thirds majority.
(iv) Has the power to remove the commission by a two thirds majority.
(v) Has a limited say in relation to the EU budget.
(vi) European Parliament consists of representatives elected directly to the parliament from all member states. Little effective power.

ANY 2 X 6 MARKS GRADED

(b) Reasons why EU tax payers have concerns about the high level of expenditure on EU agriculture

(i) Taxpayers dislike expenditure on disposing of food surpluses.
(ii) Taxpayers dislike the idea of farmers receiving the "cheque in the post".
(iii) Taxpayers object to subsides paid to sustain producers. Such payments are not made to self-employed etc.
(iv) Considerable portion of EU budget spent on agriculture. Opportunity Cost – i.e. money could be spent on education, health etc.

ANY 2 X 5 MARKS GRADED

(c) Advantages for the Irish dairy Farmer of the removal of the milk quota system

(i) No restrictions on herd size / larger herds.
(ii) Expansion now possible for those that wish to expand/ Economies of scale.
(iii) New entrants may now enter the market. New entrants to dairy farming is easily achieved

2 X 4 MARKS GRADED

Disadvantages for the Irish dairy farmer of the removal of the milk quota system.

(i) Lower prices / Downward pressure on prices
(ii) Unstable prices
(iii) Now possible for many new entrants to enter market and thereby oversupply
(iv) Quota would loose all value. Quota no longer a capital asset which can be sold, rented or transferred.

2 X 4 MARKS GRADED

TOTAL: 50 MARKS