

**WARNING**

This Question Paper **MUST** be returned with your answer book(s) at the end of the examination, otherwise marks will be lost.

Write your examination number here:



# Coimisiún na Scrúduithe Stáit State Examinations Commission

**LEAVING CERTIFICATE EXAMINATION 2018**

**THURSDAY 21 JUNE**

**MORNING 9:30 TO 12:00**

**AGRICULTURAL ECONOMICS – HIGHER LEVEL  
(320 Marks)**

Answer **fifteen** questions from Part 1 and **four** questions from Part 2.  
You should not spend more than one hour on Part 1.

**Part 1 (120 marks)**

Answer **fifteen** questions.  
Write the answers in the spaces provided.  
All questions carry equal marks (8 marks).

**Part 2 (200 marks)**

Answer **four** questions.  
Write the answers in your answer book(s).  
All questions carry equal marks (50 marks).  
Do **not** write answers to Part 2 on this question paper.

**REMEMBER TO RETURN THIS QUESTION PAPER WITH THE ANSWER BOOK(S)  
USED TO ANSWER THE QUESTIONS IN PART 2.**

## PART 1 (120 marks)

**Answer 15 questions. Write the answers in the spaces provided. All questions carry 8 marks.**

1. Tick (✓) the correct box to show whether each of the following statements is true or false. Tick **one** box in each case.
- |  | True                     | False                    |
|--|--------------------------|--------------------------|
| (i) Profit is defined as the value of output less total imputed costs.       | <input type="checkbox"/> | <input type="checkbox"/> |
| (ii) The balance sheet statement relates to a given period of time.          | <input type="checkbox"/> | <input type="checkbox"/> |
| (iii) The average fixed cost of production declines as production increases. | <input type="checkbox"/> | <input type="checkbox"/> |

2. Complete the following table by filling in the correct number of Irish farms by farm type in 2016, using the figures in the following list (source: NFS, 2017). Use each figure only once.

**15,639                      12,758                      7,387                      27,627**

<b>Farm type</b>	Tillage	Dairy	Sheep	Cattle (excluding breeding)
<b>Number of farms</b>				

3. Explain the difference between the roles of the European Commission and the Council of Ministers in formulating EU legislation.

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4. Explain the difference between real Gross Domestic Product (GDP) and nominal GDP.

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5. If the income elasticity of demand for food is 0.3 and there is a 5% increase in consumers' incomes, calculate the expected change in expenditure on food.

<b>Workings:</b>
<b>Answer:</b>

6. Identify two non-insurable risks which Irish farmers face.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

7. Irish dairy farms increased milk output by 81% between 2014 and 2016. State **two** ways in which farmers achieved this increase in production.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

8. Seamus uses a contractor to harvest his silage. The contractor's fee is €4,000. Seamus spends €2,500 less on machinery and €500 less on fuel by not harvesting the silage himself. Work out the opportunity cost of using the contractor.

<b>Workings:</b>
<b>Answer:</b>

9. State **two** reasons why a hectare of farm land in different locations around Ireland carry different prices when sold.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

10. (i) In 2017 the Irish economy grew in real terms by approximately:

2%       4%       6%       8%      [Tick (✓) the correct box]

(ii) In 2017 the Eurozone economy grew in real terms by approximately:

2%       4%       6%       8%      [Tick (✓) the correct box]

11. (i) Briefly outline the difference between a direct tax and an indirect tax.

\_\_\_\_\_  
\_\_\_\_\_

(ii) Give **one** example of each in the context of a farm business.

**Direct tax:** \_\_\_\_\_ **Indirect tax:** \_\_\_\_\_

12. Briefly outline **two** features of the Irish beef export sector that could be seen as weaknesses.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

13. Explain the difference between Gross Capital Formation and Net Capital Formation.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. Identify the two categories of information that are required by a farmer to produce a rational farm plan.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

15. Circle the correct word in each case to complete the following sentence:

For a firm's economic losses to decrease as output increases,  
its Total Revenue must be greater / less than its Total Cost, and  
its Marginal Revenue must be greater / less than its Marginal Cost.

16. State **two** criteria that can influence a farmer's production decisions, other than the maximisation of profits.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

17. For Irish farms that have borrowings, the average borrowing is €63,293. (Source: NFS, 2017) Briefly outline **two** potential dangers of excessive borrowing for a farm business.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

18. Tick (✓) the correct box to show what type of organisation each of the following are. Tick **one** box in each case.

	Public company	State body	Voluntary body
(i) Irish Farmers Association	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(ii) Kerry Group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iii) Coilte Teoranta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. State the **four** freedoms of movement that underpin the European Single Market.

(i) \_\_\_\_\_ (ii) \_\_\_\_\_

(iii) \_\_\_\_\_ (iv) \_\_\_\_\_

20. Circle the correct word in each case to complete the following sentence:

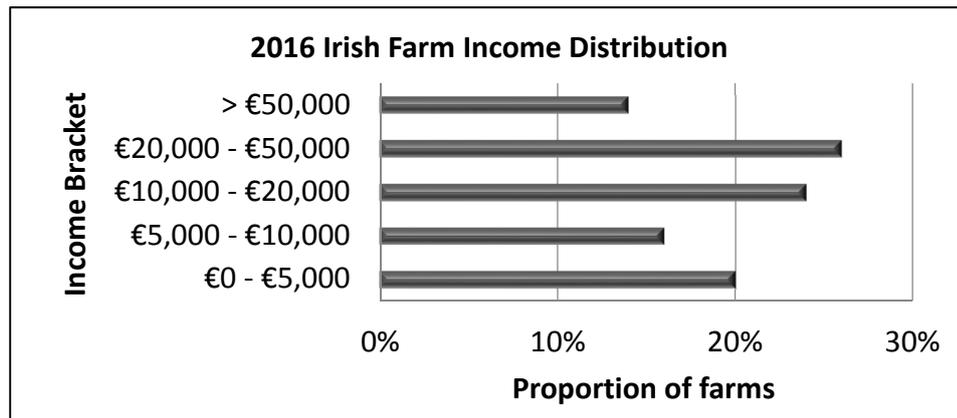
An Oligopoly market structure is one with high / low barriers to entry,  
in which a small / large number of firms compete  
and decisions on market action are interdependent / independent.

**REMEMBER TO RETURN THIS QUESTION PAPER WITH THE ANSWER BOOK(S)  
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## PART 2 (200 marks)

**Answer 4 questions. Write the answers in your answer book(s). All questions carry 50 marks.  
Do not write answers to Part 2 on this question paper.**

1. (a) State whether each of the following are included in Susan’s family farm income (FFI) as defined under the National Farm Survey (NFS). Justify your answer in each case.
- (i) Susan’s EU direct farm payments.
  - (ii) Income from selling 20 cattle during the year.
  - (iii) Rental income from Susan’s apartment in the city.
- (b) The bar chart below shows the income distribution in Irish farming (source: NFS, 2017).



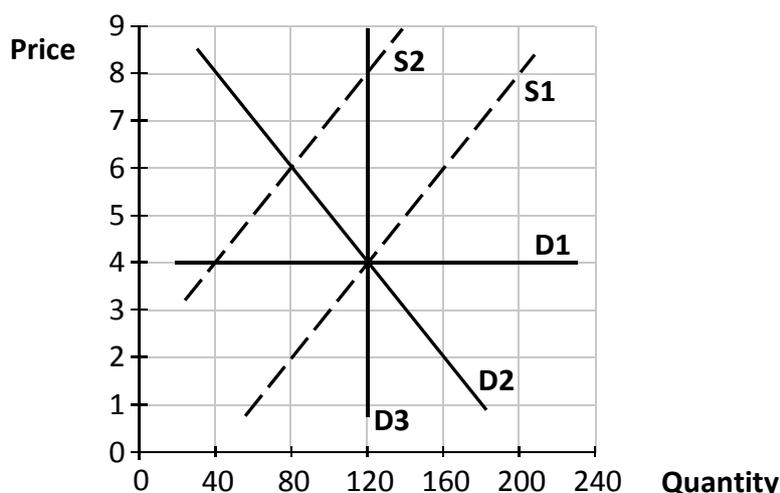
- (i) Discuss **three** reasons why there is such a wide income distribution in Irish farming, as shown in the bar chart.
  - (ii) Compare the importance of direct farm payments in maintaining farm income in the Irish dairy and beef sectors.
- (c) Irish farm income can be highly volatile. Outline **three** measures that can be used by Irish farmers to offset the risks arising from such volatility.

**[50 marks]**

2. (a) Explain the difference between a fixed and a variable factor of production, **and** provide **one** example of **each** used in farming.
- (b) (i) Draw a labelled diagram showing a typical total product curve for an agricultural product.
- (ii) Outline what the total product curve on your diagram represents.
- (iii) State the law of diminishing returns **and** discuss how it is demonstrated on your diagram.
- (iv) Outline the role technological progress can make in improving agricultural productivity. Illustrate **and** explain such a change using your diagram.
- (c) Outline **three** economic gains that can be derived from a rise in agricultural productivity.

**[50 marks]**

3. The diagram below shows the supply curves (the broken lines **S1** and **S2**) and the possible demand curves (**D1**, **D2**, and **D3**) for agricultural commodity X.



- (a) Identify which of the demand curves in the diagram is perfectly elastic **and** which one is perfectly inelastic in relation to price. In each case, explain your answer **and** state the value of the price elasticity of demand (PED).
- (b) Using the supply curve **S1**, calculate the initial total revenue (TR) in the market under the above demand conditions.
- (c) Assume there is a change in supply and the supply curve becomes **S2**.
- State whether this change represents an increase or a decrease in supply. Explain your answer.
  - Outline **four** variables that could have created this change in supply.
  - For each of the demand curves **D1**, **D2**, and **D3**, calculate the change, if any, in total revenue as a result of this change in supply. Show your calculations.

[50 marks]

4. (a) Briefly outline Ireland's commitments under the EU's greenhouse gas emission targets **and** discuss the contribution of agriculture to Ireland's emissions.
- (b) Climate change presents a growing challenge for the agricultural sector across the EU.
- Outline **two** ways in which climate change may affect farming in the EU.
  - Outline **two** measures farms can introduce to help them cope with the potential effects of climate change.
- (c) The Rural Development Programme 2014-2020 has a number of measures to promote environmental protection. Four of these measures are listed below.
- Pick **two** of these measures and, in the case of each one, discuss the broad aims of the measure **and** discuss how the measure can contribute to environmental protection.
- Knowledge Transfer and Information Actions.
  - Investment in Physical Assets Measures.
  - The Green, Low-carbon, Agri-environment Scheme.
  - Areas Facing Natural Constraint Measures.

[50 marks]

5. (a) Define the term exchange rate **and** explain the difference between fixed and floating exchange rate systems.
- (b) During the second half of 2016 following the Brexit referendum, the UK sterling exchange rate fell in value against the euro from €1.29 for £1 to €1.17 for £1, a fall of 9.3%. Discuss the impact such a change in exchange rates with a major trading partner can have on Irish net exports **and** on Irish inflation.
- (c) (i) Outline **two** potential challenges for the Irish agri-food sector arising from Britain leaving the EU, other than the change in exchange rates.
- (ii) Outline **two** measures being taken by the Irish government to help the Irish agri-food sector deal with these challenges.

[50 marks]

6. (a) The table below shows the actual cash-flow situation for Mary's farm in 2017.

	Q1 (Jan-Mar) €	Q2 (Apr-Jun) €	Q3 (Jul-Sep) €	Q4 (Oct-Dec) €	Total €
<i>Receipts</i>					
Farm income	12,000	25,000	40,000	13,000	90,000
Non-farm income	15,000	<b>B</b>	5,000	4,000	39,000
Total receipts	27,000	40,000	45,000	17,000	129,000
<i>Payments</i>					
Farm payments	25,000	15,000	15,000	25,000	80,000
Household costs	12,000	15,000	16,000	17,000	60,000
Total payments	<b>A</b>	30,000	31,000	42,000	140,000
Opening cash	8,000	-2,000	<b>C</b>	22,000	
Closing cash	-2,000	8,000	22,000	-3,000	
Net cash flow	-10,000	10,000	14,000	<b>D</b>	

- (i) Calculate the values of **A**, **B**, **C**, and **D**, the missing entries in the table.
- (ii) Compare the cash situation on Mary's farm at the start and the end of 2017, **and**, based on the figures in the table, outline the factors that led to this change in the cash situation.
- (iii) Outline **three** measures that Mary could consider for 2018 to improve the cash-flow situation for the farm.
- (b) Michael is a tillage farmer who rents land under Conacre. He has been given the opportunity to buy the land for €130,000. He will need to finance this using a loan. The annual repayments on a 10-year loan are €150 for each €1,000 borrowed. His annual projected net cash flow is €12,000.
- (i) Calculate Michael's repayment capacity **and** discuss whether or not he can afford the loan repayments. Show your workings.
- (ii) Alternatively, Michael could lease the land on a long-term basis. Outline **three** advantages a long-term lease will offer over the current Conacre lease.

[50 marks]

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There is no examination material on this page.

Leaving Certificate 2018

**Agricultural Economics**  
Higher Level

Thursday 21 June  
Morning 9:30 to 12:00