Write your Examination Number here ⇒

Coimisiún na Scrúduithe Stáit
State Examinations Commission

LEAVING CERTIFICATE EXAMINATION 2016

WEDNESDAY 22 JUNE   MORNING 9:30 - 12:00

AGRICULTURAL ECONOMICS – ORDINARY 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.

PART 1 (120 marks)

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

1. Use **three** of the five words below to complete the definition of Economics.

ALTERNATIVE   SCARCE   SOCIAL   NATURAL   MARGINAL

Definition: 'Economics is a _____ science that studies the allocation

of _____ resources which have _____ uses.'

2. **(i)** The Consumer Price Index is typically used to measure: (tick (✓) **one** answer)

☐ Economic growth   ☐ Consumer confidence   ☐ Inflation

(ii) If inflation falls from 4% to 2%, then the general price level is: (tick (✓) **one** answer)

☐ Falling   ☐ Rising   ☐ A serious economic problem

3. State **one** example from agricultural production for **each** of the following.

(i) A substitute good to sheep in production: _____

(ii) A complementary good to barley grain in production: _____

4. Good X has a price elasticity of demand (PED) of – **1.5** and an income elasticity of demand
(YED) of + **1.5**. Complete the following statement by **circling** the correct word in **each case**.

'This means that Good X is price **elastic / inelastic** and a(n) **luxury / inferior** good.'

5. Fill in the missing words in the statement below.

'Net worth, or equity, is calculated from farm accounts.

It is the difference in value between total _____ and total _____ .'

6. Fill in the three spaces labelled **A**, **B**, and **C** below to complete the food supply chain for **cheese**.

A		B		C		Processing / Marketing resources		Cheese
	+		→		+		→	
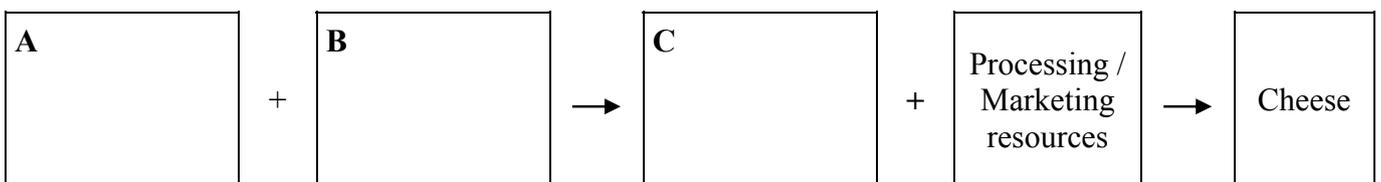
7. What likely effect would a general fall in the value of the euro (€) against other currencies have
on **each** of the following? (tick (✓) **one** answer in **each case**)

		Increase	Decrease	No change
(i)	The quantity of Irish beef demanded by UK consumers.	☐	☐	☐
(ii)	The price of Irish butter in Spanish supermarkets.	☐	☐	☐

8. State **two** ways in which long-term land transfer can take place in Ireland.

(i) _____

(ii) _____

9. (i) Complete the following statement:

'The EU Single Farm Payment scheme was replaced in 2015

by the B_____ Payment and the Greening schemes.'

(ii) Name the official national institution from which Irish farmers receive their payments.

_____

10. Define the term 'Labour Force' **and** state which national survey (other than the Census) is used by the Central Statistics Office to estimate its size.

(i) **Definition**: _____

_____

(ii) **National survey**: _____

11. Complete the following statement by **circling** the correct word in **each case**.

'The ratio of liabilities to net worth is a measure of **liquidity / solvency** and

can be calculated from data which appear in the farm's **balance sheet / profit & loss account**.'

12. Complete the following statement by **circling** the correct word in **each case**.

'An EU directive is legislation that is

binding / non-binding on Member States as regards the results to be achieved,

and **binding / non-binding** as to the methods to be used to achieve these results.'

13. The following table shows the response of output Y to units of input X, while all other inputs remain unchanged.

Units of input X	3	4
Units of output Y	15	24

Use the values in the table to identify the correct value in **each** of the following.
(tick (✓) **one** answer in **each case**)

(i) Average output using 3 units of input X: ☐ 3 units ☐ 4 units ☐ 5 units

(ii) Marginal output of the 4th unit of input X: ☐ 6 units ☐ 9 units ☐ 12 units

14. (i) Explain what is usually meant by 'Political Lobbying'. _____

_____

_____

(ii) Name **one** organisation that lobbies on behalf of Irish farmers. _____

_____

15. Outline **two** benefits to farmers of producing certified quality-assured products.

(i) _____

(ii) _____

16. Identify whether **each** of the following statements is true or false.
(tick (✓) **one** answer in **each case**)

		True	False
(i)	Agriculture is a primary industry.	☐	☐
(ii)	Profit is always maximised when output is maximised.	☐	☐
(iii)	Supply of land for farming is highly price inelastic.	☐	☐

17. In 2014, Ireland's agri-food sector accounted for approximately what percentage of **each** of the following national outcomes? (tick (✓) **one** answer in **each case**)

(i) National output ☐ 3% ☐ 8% ☐ 27%

(ii) National exports of merchandise goods ☐ 13% ☐ 25% ☐ 38%

18. Define the term 'Opportunity Cost' **and** give an example in the context of farming.

(i) **Definition**: _____

_____

_____

(ii) **Example**: _____

_____

19. The pie chart shows the total number of cattle, sheep, and pigs in Ireland in June 2015.
Complete the table below to show which of the segments X, Y, and Z in the pie chart corresponds to which animal. Each animal can appear only once in the table.

Label on pie chart	Number of animals	Animal
X	1.5 million	
Y	5.2 million	
Z	7.0 million	

Farm animals in Ireland, June 2015
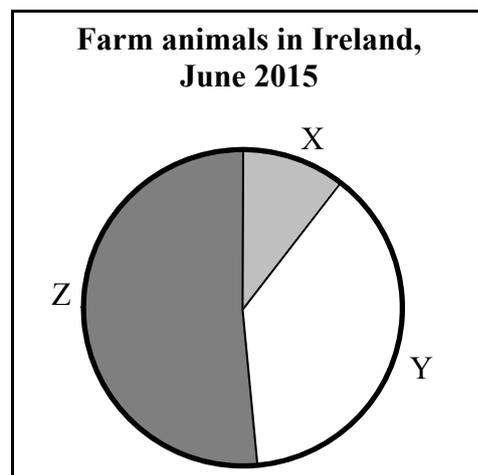
20. Give **one** example of **each** of the following, in the context of farming.

(i) Current asset: _____

(ii) Current liability: _____

(iii) Fixed asset: _____

(iv) Long-term liability: _____

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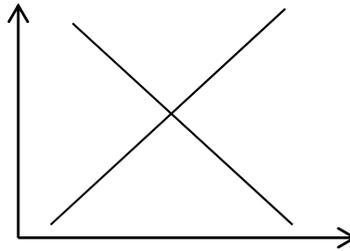
PART 2 (200 marks)

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.

1. The diagram below shows the market demand and supply curves for milk in the EU.

    (a) **(i)** Copy the diagram into your answer book.
             Label both axes **and** the demand (D1) **and** supply (S1) curves for milk.

        (ii) Identify the equilibrium price (P1) **and** quantity (Q1) of milk on your diagram.

    (b) Assume there is an increase in demand for EU milk, leading to a shift in the demand curve.

        (i) State **one** possible reason for an increase in demand for EU milk.

        (ii) Show this increase in demand on your diagram. Label this new curve D2.

        (iii) Identify on your diagram the new price (P2) and quantity (Q2) of milk produced on the EU market.

        (iv) Describe the impact of the increase in demand on the market price and market quantity of milk.

    (c) EU milk production quotas were abolished in April 2015.
        Outline the likely impact of this abolition on the supply and price of EU milk.

   **[50 marks]**

2. A farmer is considering expanding the size of his dairy herd while reducing his production of barley for sale. He will gain extra revenue and incur costs by expanding the dairy herd. At the same time he will forego (i.e. miss out on) revenue and save costs by producing less barley. A summary of a partial budget, which takes all these factors into account, is shown below.

Partial Budget (€ per annum)			
Gains from more cows / less barley		*Losses from more cows / less barley*	
A. Extra revenue 20,000		**C.** Extra costs 10,000	
B. Costs saved 5,000		**D.** Revenue foregone 8,000	
Total gains **X**		**Total losses** **Y**	
Net gain / loss = Z			

    (a) State **one** item that might be included under **each** heading **A**, **B**, **C**, and **D** for this farm.

    (b) Calculate the total gains (**X**), the total losses (**Y**), and the net gain / loss (**Z**) for this farm.

    (c) Based on this partial budget, should the farmer go ahead with the proposed change in his farming system? Explain your answer.

    (d) Apart from the financial aspects dealt with in the partial budget, explain **one** other factor the farmer should take into account when considering a change to more dairy cows and less barley production.

                                                          [50 marks]

3. The diagram below shows cost and revenue curves for a typical dairy farm.
The curves are labelled **A**, **B**, Total Costs, and Total Revenue.
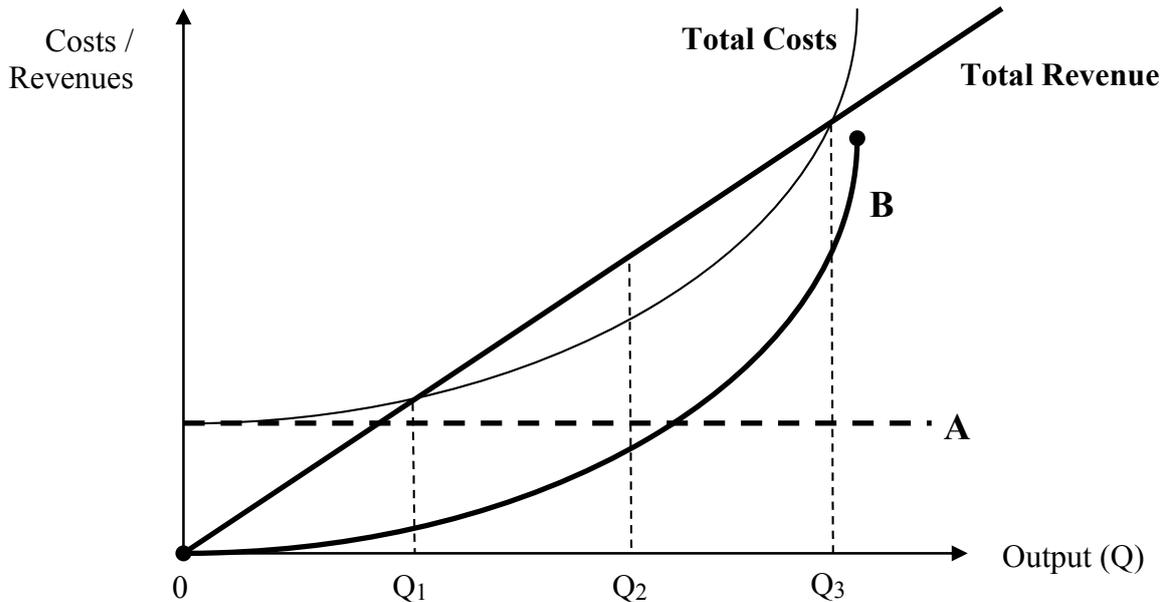
(a) Identify which of the cost curves **A** and **B** above represents Total Variable Costs and which represents Total Fixed Costs. Explain your answer in **each** case.

(b) State **one** example of a variable cost item **and** one example of a fixed cost item that could apply to this dairy farm.

(c) Define the term 'Total Revenue'.

(d) Explain why, at zero output:

  (i) Total revenue is zero

  (ii) Total costs are greater than zero.

(e) Referring to the diagram above, identify for this farm:

  (i) The profit-maximising level of output

  (ii) A break-even level of output

  (iii) An output range in which the farm would be making a loss.

[50 marks]

4. **(a)** Give **three** examples of capital items used in Irish agricultural production.

(b) Explain why there will be a need for capital formation (i.e. additional capital investment) in Irish agriculture over the coming years.

(c) State **one** source of finance that can be used to fund capital formation at farm level.
Outline **one** possible advantage and **one** risk of this source.

(d) There have been significant advances in the new information and communications technologies (ICT) or so-called smart technologies.
Outline **one** example of how new technologies can contribute to improved farm management.

[50 marks]

5. **(a)** Explain the difference between 'Factor of Production Inputs' and 'Intermediate Inputs' as used in the farming sector.

**(b)** Certain inputs used in farming can be categorised as follows:

A. Inputs generally produced and used in farming	B. Inputs not produced by farming but used mainly in farming	C. Inputs not produced by farming and used in other sectors as well as farming

State to which of the above categories **A**, **B**, or **C each** of the following inputs belongs:

(i) Grain-based animal feed

(ii) Diesel

(iii) Fertilisers

(iv) Accountancy services

(v) Crop-protection products.

(c) The graph below shows the real price of Electricity, Fertilisers, and Veterinary expenses as incurred by Irish farmers since 2005.
The effects of general inflation have been taken out of each series. (Source: CSO)
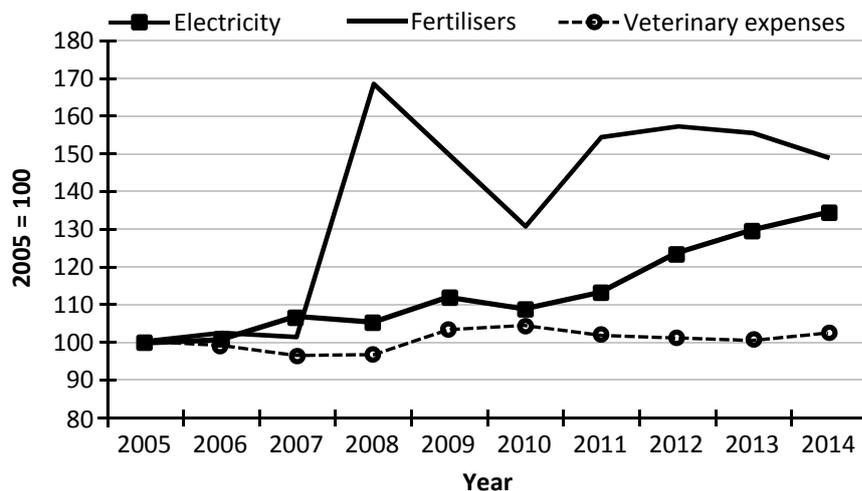
Discuss **each** series with reference to **each** of the following.

(i) Overall trend in real price since 2005

(ii) Volatility (i.e. fluctuations) in real price since 2005.

[50 marks]

6. Two important organisations for Irish agriculture are:

(a) Teagasc   **(b)** Bord Bia.

Discuss **each** of these organisations with reference to:

(i) The main aim of the organisation

(ii) The main functions of the organisation

(iii) Benefits to farmers from the activities of the organisation.

[50 marks]

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