

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, 2013

WEDNESDAY 19 JUNE – MORNING 9.30-12.00

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.

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 **fifteen** questions.

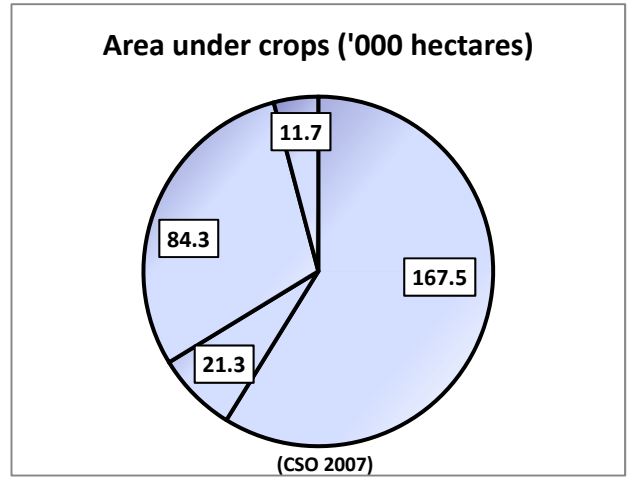
Write the answers in the spaces provided.

All questions carry equal marks.

1. In Ireland approximately 285,000 hectares of land is used for crop production. The pie chart on the right shows the number of hectares under each of the four main crop types. Complete the table below by filling in the number of hectares used for each crop type.

(one entry is completed for you)

Crop	Area ('000 hectares)
Barley	
Oats	
Potatoes	11.7
Wheat	



2. Conacre is the rental of agricultural land for a period of up to 11 months / 16 months / 24 months.
(Circle the correct answer)

3. When collecting official statistics, the Central Statistics Office (CSO) defines agriculture as: _____
- _____
- _____

4. Assume that in a given year the Agricultural Output Price Index (AOPI) was 80 and the Agricultural Input Price Index (AIPI) was 125. Use the space below to calculate the farmers' terms of trade.

Workings:	Answer: _____
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5. In 2011, Ireland exported approximately 50% / 70% / 90% of its net beef output, with approximately 25% / 50% / 75% of it going to the UK market.

(Circle the correct answers)

6. What do the following initials represent in agricultural policy?

(i) REPS: _____

(ii) AEOS: _____

7. *Real GDP* is defined as: _____

8. If a farm has a liquidity ratio of 0.67:1 and a net worth ratio of 0.66:1, which of the following best describes the financial position of the farm?

The farm is solvent and the liquid assets are sufficient to meet current liabilities.	
The farm is bankrupt but its liquid assets are sufficient to meet current liabilities.	
The farm is solvent but it has some liquidity problems.	

(Place a ✓ in the appropriate box)

9. State **two** benefits for a dairy farmer of being part of a registered Milk Production Partnership:

(i) _____

(ii) _____

10. Distinguish between *inflation* and *deflation*: _____

11. State **two** characteristics of Irish farming that can limit successful marketing:

(i) _____

(ii) _____

12. The *Milk Quota Trading Scheme* is: _____

13. State **two** types of legislative instrument used by the EU:

(i) _____

(ii) _____

14. Distinguish between *Ad Valorem* and *Variable* levies: _____

15. In Ireland a small number of dairy processors control the majority of the market share between them. This indicates that the dairy processing market is perfectly competitive / a monopoly / oligopolistic.
(Circle the correct answer)

16. The role of the Food Safety Authority of Ireland (FSAI) is: _____

17. State **two** impacts of the economic recession on Irish consumer behaviour in relation to food:
(i) _____
(ii) _____

18. *Gross Capital Formation* in agriculture is: _____

19. The *technically efficient* region of production is: _____

20. Write TRUE or FALSE after each of the following statements:

Real interest rates are nominal interest rates adjusted for inflation.	
Nominal interest rates are real interest rates adjusted for inflation.	
Real interest rates are negative if the inflation rate is less than nominal interest rates.	

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PART 2 (200 marks)

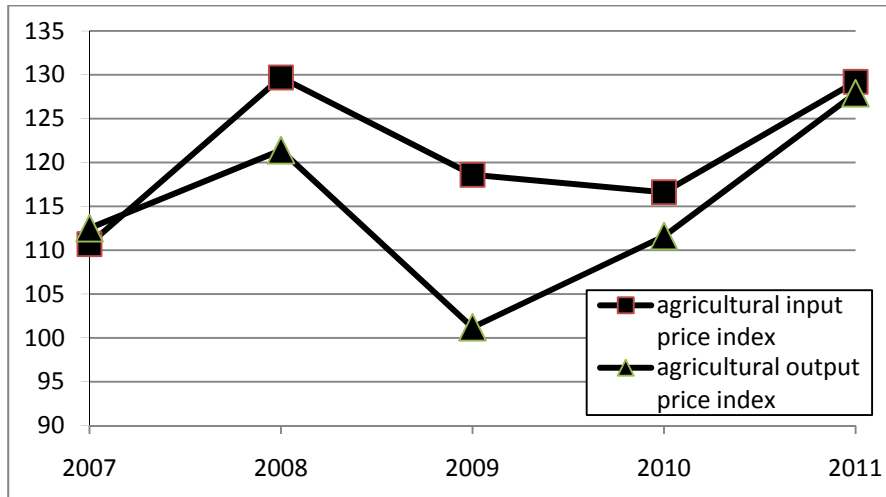
Answer **four** questions.

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 graph below indicates Irish Agricultural Input Prices and Agricultural Output Prices between 2007 and 2011 (Base Year 2005 = 100).



(Source: Central Statistics Office)

- (a) State what is meant by the term 'price-cost squeeze'.
- (b) Using the above graph identify the years between 2007 and 2011 when Irish farmers experienced a price-cost squeeze **and** explain your answer.
- (c) Inputs can be categorised as:

1. Those supplied within farming and used mainly within farming.
2. Those supplied from outside farming but used mainly within farming.
3. Those supplied from outside farming but used within and outside farming.

- (i) State **two** examples in **each** category.
- (ii) Discuss the factors that influence changes in the price of inputs in **each** category.

(50 marks)

2. "Credit conditions for SMEs (Small and Medium Enterprises) are tougher in Ireland than anywhere else in the euro area both in terms of cost and availability."

(Patrick Honohan, Central Bank Governor, Irish Examiner, March 3, 2012)

- (a) When applying for credit, a farmer needs to consider its **term**, **security** and its **cost**. Discuss **each** of these aspects of credit, with reference to the current economic climate.
- (b) Calculate the **loan repayment capacity** of a farmer with a total annual income of €60,000 and annual family living expenses of €40,000 if the annual repayment on a €1,000 loan is €250.
- (c) Discuss **two** reasons why a farmer should create a **cash-flow budget** when considering a loan.

(50 marks)

3. The following table shows Agricultural Output, Inputs and Income, for 2011, in €m.

Agricultural Output, Inputs and Income	2011 (€millions)
Gross Value of Agricultural Output	5,109
Materials and Services	3,315
Direct Payments	1,860
Levies	15
Depreciation	720
Wages to agricultural workers + land rental + Bank Charges	866

(Source: IFA Farming Income Review, 2011)

- (a) Using the data in the above table calculate:
- Gross Agricultural Product at Market Prices;
 - Gross Agricultural Product at Factor Cost;
 - Net Agricultural Product at Factor Cost;
 - Family Farm Income.
- (b) Discuss the role of agricultural exports in helping Ireland overcome its on-going economic difficulties.
- (c) Discuss how Ireland benefits from the Common Agricultural Policy (CAP) in terms of its direct budgetary effect **and** its effects on trade prices.
- (50 marks)**

4. The following table provides figures on changes in fertilizer use and crop yield on a potato farm.

Fertilizer (100 kg)	Crop Yield (Tonnes/ha)
1	2
2	4
3	7
4	11
5	14
6	16
7	17
8	18
9	19
10	20

- (a) Using the above table construct a total product curve, placing the amount of fertilizer used on the horizontal x-axis and the crop yield on the vertical y-axis.
(You may use graph paper to complete this question.)
- (b) Referring to the total product curve you have drawn, explain the following terms:
- Increasing returns;
 - Diminishing returns;
 - Constant returns.
- (c) Using the total product curve you have drawn, illustrate **and** explain the impact of technological progress on crop yield.
- (50 marks)**

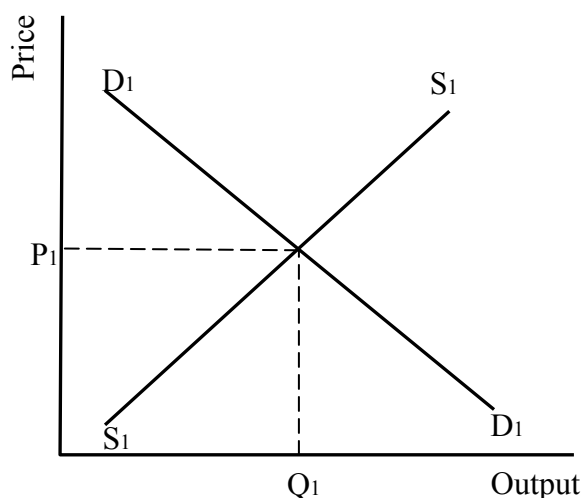
5. The following table provides figures on change in real income and changes in the quantity demanded for various products in a given year.

Increase in real money income	+ 3%
Change in the quantity demanded of fresh beef	+ 6%
Change in the quantity demanded of milk	+ 1.5%
Change in the quantity demanded of frozen beef burgers	- 1.8%

- (a) Explain the term income elasticity of demand (YED) for food.
- (b) Calculate the YED for **each** of the above products (fresh beef, milk and frozen beef burgers).
- (c) Explain what the YED you calculated tells us about the nature of **each** product.
- (d) The YED for food in general declines as real incomes rise. Explain why this is the case.
- (50 marks)**

6. “The international outlook for food availability and prices is underpinned by the need for global food production to increase by 70% to meet expected population demands by 2050.”
(Department of Agriculture, Food and the Marine Annual Review and Outlook 2011/12).

The diagram below represents the world market for food, with D_1D_1 representing global demand and S_1S_1 representing global supply.



- (a) Copy the above diagram into your answer book.
- (i) Using the diagram you have drawn, illustrate **and** discuss the impact of a reduction in the amount of food wasted by consumers on world food prices and quantity.
- (ii) Outline **two** costs to society of food wastage.
- (iii) Discuss **two** ways in which governments could reduce the amount of food wasted by consumers.
- (b) Copy the above diagram into your answer book again.
- (i) Using the diagram you have drawn, illustrate **and** discuss the impact of better management of water supply on world food prices and quantity.
- (ii) Discuss **two** ways in which governments could improve the management of water supply.
- (50 marks)**

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