



South Australian
Certificate of Education

Economics 2024

Question booklet 1

- Questions 1 to 3 (40 marks)
- Answer **all** questions
- Write your answers in this question booklet
- You may write on page 12 if you need more space
- Allow approximately 65 minutes

Examination information

Materials

- Question booklet 1
- Question booklet 2
- SACE registration number label

Instructions

- Use black or blue pen
- You may use a sharp dark pencil for diagrams

Total time: 130 minutes

Total marks: 80

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The SACE Board of South Australia acknowledges that this examination was created on Kaurna Land. We acknowledge First Nations Elders, parents, families, and communities as the first educators of their children, and we recognise and value the cultures and strengths that First Nations students bring to the classroom. We respect the unique connection and relationship that First Nations peoples have to Country, and their ever-enduring cultural heritage.

Attach your SACE registration number label here



Government
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AUSTRALIA

1. Refer to the following information.

Three types of eggs are sold to consumers in Country X.

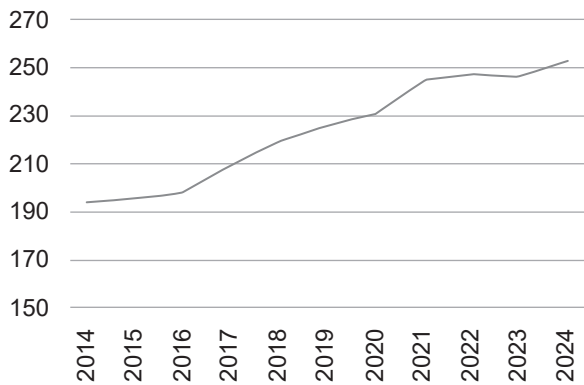
Cage eggs – eggs laid by hens housed in cages inside large sheds.

Barn-laid eggs – eggs laid by hens that are housed in large sheds. There are no cages, but the hens do not have access to outdoors.

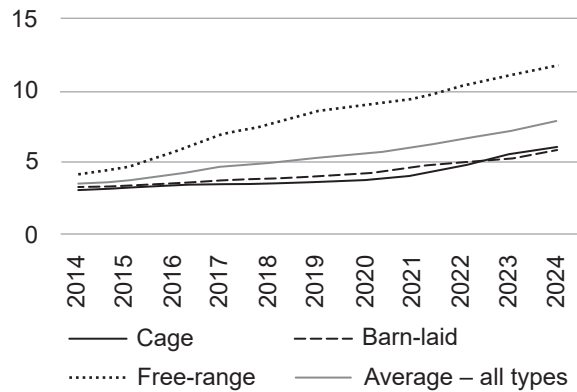
Free-range eggs – eggs laid by hens that have access to secure outdoor fields during the day but are housed in sheds at night.

The following graphs show changes in the egg industry in Country X since 2014.

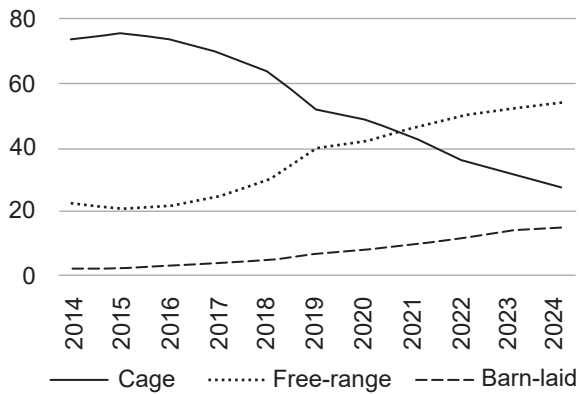
Graph 1: Mean Annual Egg Consumption (all types) – per person



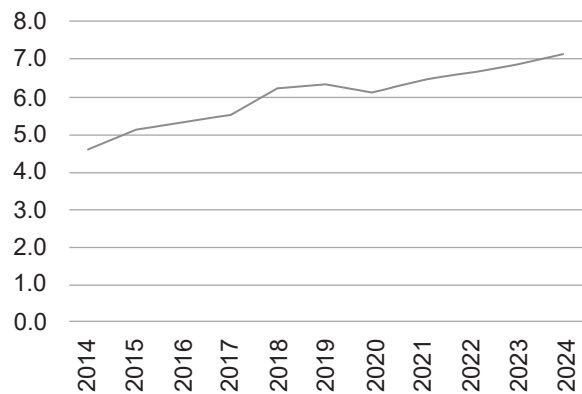
Graph 2: Egg Prices per Dozen – by type



Graph 3: Market Share – by type (%)



Graph 4: Egg Production (annual % growth)



(a) Outline *two* changes in the egg industry in Country X since 2014.

Change 1: _____
 _____ (1 mark)

Change 2: _____
 _____ (1 mark)

- (b) (i) Which of the following diagrams best represents market conditions for eggs since 2014?
Tick the appropriate box.

Diagram A
Market for Eggs

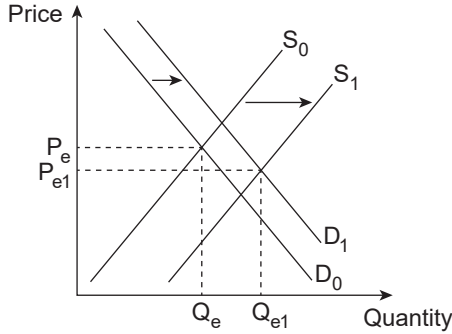


Diagram B
Market for Eggs

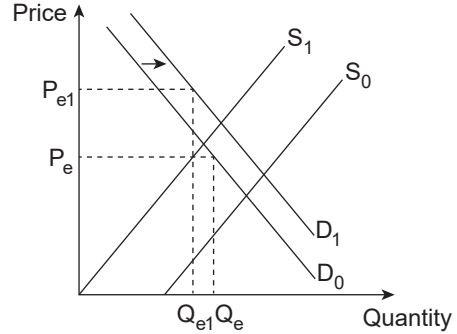


Diagram C
Market for Eggs

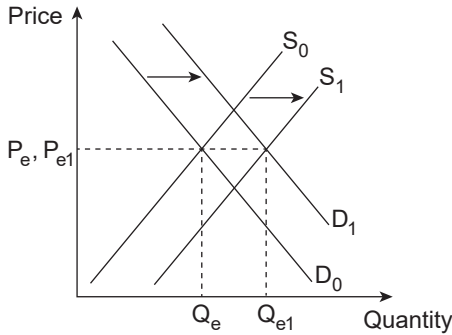


Diagram D
Market for Eggs

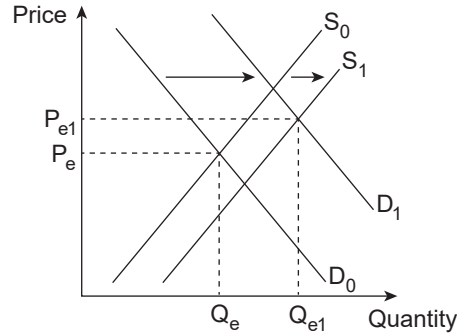


Diagram A Diagram B Diagram C Diagram D

(1 mark)

- (ii) With reference to your answer to part (b)(i), explain the process by which the market adjusts from the original equilibrium (P_e, Q_e) to the new equilibrium (P_{e1}, Q_{e1}).

_____ (2 marks)

- (c) Outline *one* reason why the price elasticity of supply (PES) of eggs is likely to increase in the long run.

_____ (1 mark)

- (d) Explain why the price elasticity of demand (PED) for free-range eggs is likely to be different to the PED for the total of all types of eggs.

(2 marks)

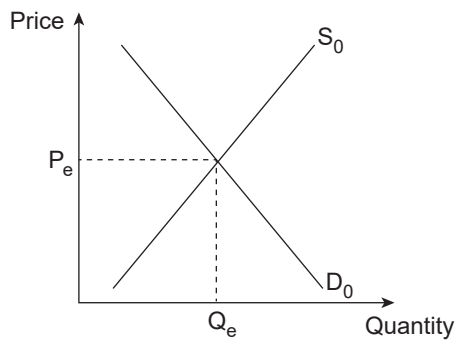
Additional information

After a successful campaign by animal welfare groups, the government of Country X decided to ban the production of cage eggs from 2030. Industry experts have predicted that this ban will lead to:

- higher costs of production because both free-range and barn-laid eggs require more resources.
- producers of cage eggs leaving the industry rather than switching to producing other types of eggs.

- (e) Explain the likely impact that the ban on cage eggs will have on the market for eggs in 2030. Complete the diagram below to support your answer.

Market for Eggs



(3 marks)

Additional information

A recent study investigated the relationship between average consumption of cage and free-range eggs and price. The study found the following relationships:

Average consumption of cage eggs and price $R^2 = 0.74$

Average consumption of free-range eggs and price $R^2 = 0.14$

- (f) (i) Interpret the R^2 value for the average consumption of cage eggs and price. In your answer, comment on the strength of the relationship.

(2 marks)

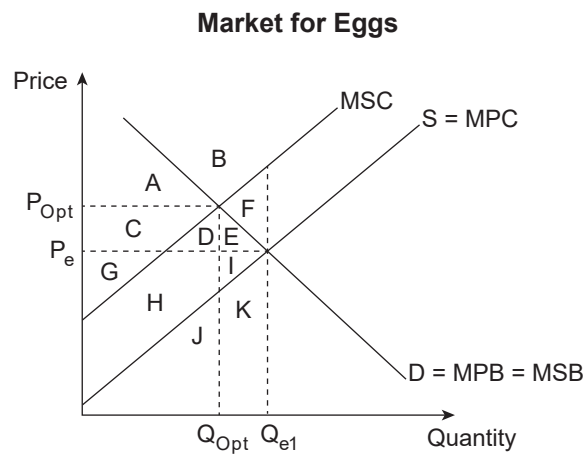
- (ii) Explain *one* likely reason why the R^2 value for the average consumption of free-range eggs and price is lower than the R^2 value for the average consumption of cage eggs and price.

(2 marks)

2. Refer to the following information.

The production of eggs creates costs for the environment such as an increase in greenhouse gases and contamination of soil and water. Environmental groups in Country X claim that the market price of eggs does not account for the total social cost of egg production. They suggest that a tax on the production of eggs is one way to respond to this market failure. Economists argue that it is important to implement a tax that reflects the exact cost of the externality from the production of eggs.

(a) The diagram below shows the externality that exists in the market for eggs.



(i) Identify the type of externality shown in the diagram above. Tick the appropriate box.

- a. Positive Production Externality
 - b. Negative Production Externality
 - c. Positive Consumption Externality
 - d. Negative Consumption Externality
- (1 mark)

(ii) Justify your answer to part (i).

_____ (1 mark)

(iii) Using a letter or letters, identify the areas on the diagram in part (a) above that represent each of the following:

Producer surplus	
Deadweight loss	

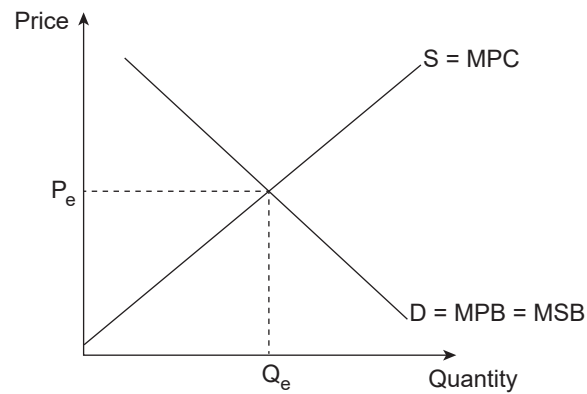
(2 marks)

- (iv) Explain why the existence of the externality in the egg market results in market failure. Refer to the diagram in your answer.

(2 marks)

- (b) Assess whether a tax on the production of eggs should be implemented by the government of Country X to reduce the market failure. Complete the diagram below to support your answer.

Market for Eggs



(5 marks)

3. Refer to the following information.

The wholesale market for eggs in Country G is dominated by two firms, Eggcellent and Eggtastic. These firms have a combined market share of 90% and are currently both pricing their eggs at a higher price than competitive market price.

The government is being pressured to investigate alleged collusion between these two firms. Initial investigations have established the following payoff matrix which indicates the profit levels (\$million) based on high pricing and market pricing strategies. The government has decided not to intervene as economic theory suggests that pricing will move to a market pricing strategy for both firms.

		Eggcellent	
		High Pricing	Market Pricing
Eggtastic	High Pricing	15 / 15	11 / 18
	Market Pricing	18 / 11	12 / 12

(a) Outline why the wholesale market for eggs is considered a duopoly.

(1 mark)

(b) (i) Explain why producers are more likely to be able to collude in a duopoly than in an oligopoly with more firms.

(2 marks)

- (ii) Explain why the current high pricing strategy used by both firms supports the view that the alleged collusion is occurring in the wholesale market for eggs.

(2 marks)

- (iii) Other than higher prices, outline *two* possible implications for consumers if collusion is occurring between both firms.

Implication 1: _____
_____ (1 mark)

Implication 2: _____
_____ (1 mark)

- (iv) Outline why a market pricing strategy for both firms would be considered the Nash equilibrium.

(1 mark)

- (c) The price elasticity of demand for wholesale eggs is relatively inelastic. Explain why the revenue and profits of both firms fall when they both use a market pricing strategy.

(2 marks)



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Question booklet 2

- Questions 4 and 5 (40 marks)
- Answer **all** questions
- Write your answers in this question booklet
- You may write on page 8 if you need more space
- Allow approximately 65 minutes

2

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Copy the information from your SACE label here

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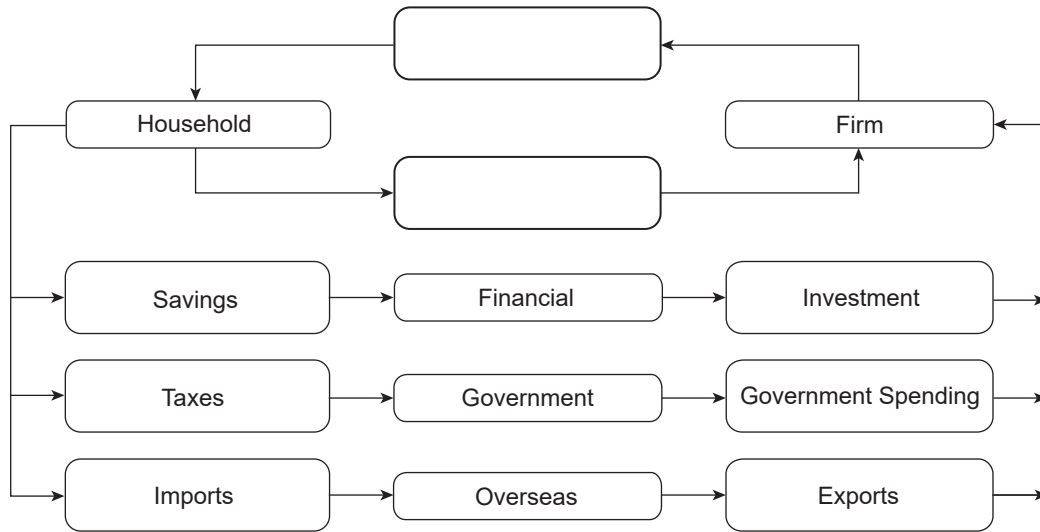
Government
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4. Refer to the information below.

In 2019, the government of Country Y decided to finance and build a major new international airport. To fund its increased spending, the government decided to increase taxes on household income.

In expectation of an increase in passenger and freight business, Country Y's two major airlines decided to purchase additional planes from a domestic producer.

(a) Label the two missing money flows in the circular flow of income model below.



(1 mark)

(b) Using the circular flow of income model and the concept of the expenditure multiplier, discuss the likely effect on economic activity in Economy Y of the increase in government spending to build a new airport.

(3 marks)

- (c) Outline why the purchase of additional planes by Country Y's major airlines represents an investment flow in the circular flow of income model.

_____ (1 mark)

- (d) Explain how the increase in taxes on household income would affect the size of the expenditure multiplier.

_____ (2 marks)

- (e) Explain why the government of Country Y needs to understand the concept of the expenditure multiplier when attempting to meet its full employment objective.

_____ (2 marks)

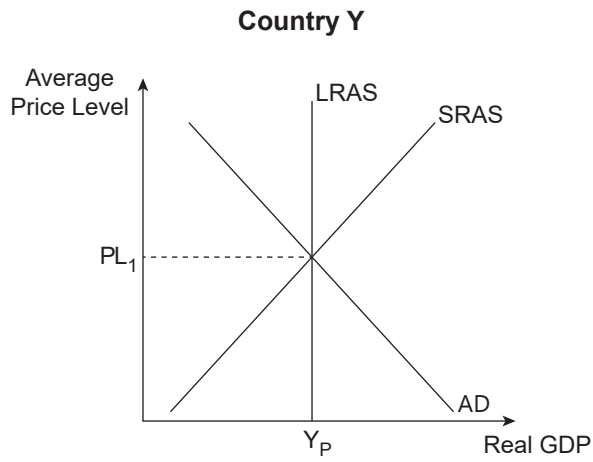
Additional information

Many economists have praised the government's decision to build the new airport, claiming that it will contribute to increased potential GDP. However, some economists have been critical of the government for deciding to operate the airport as a public enterprise, rather than privatising it.

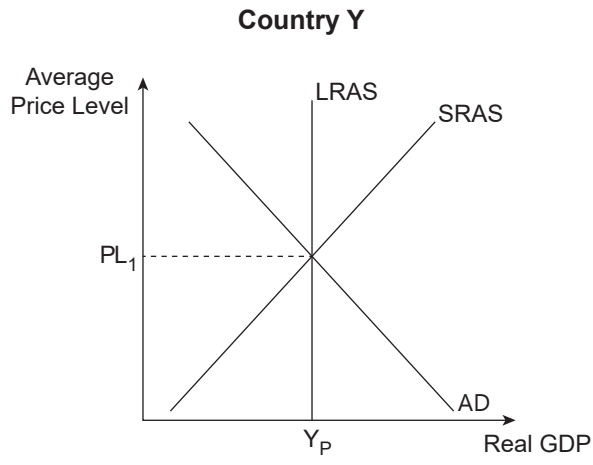
- (f) Explain why building the new airport might increase potential GDP.

_____ (2 marks)

(g) (i) Illustrate the *short-term* effects of building the new airport on the AD-AS diagram below.



(ii) Illustrate the *long-term* effects of building the new airport on the AD-AS diagram below.



(h) Evaluate the government's decision to operate the new airport as a public enterprise rather than privatising it.

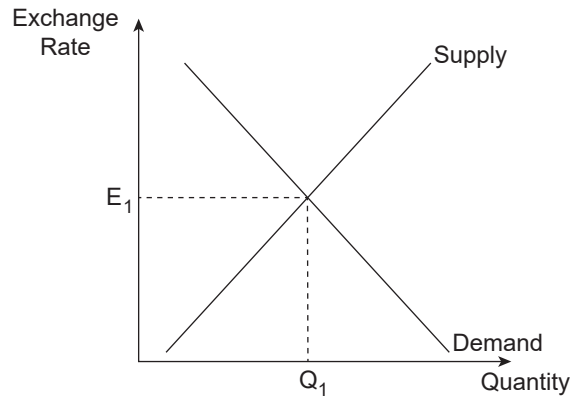
(4 marks)

Additional information

Once built, the new airport led to a significant boost in both passenger and freight capacity. In 2023, this increased the value of trade by \$80 billion, with Country Y's imports increasing by \$30 billion and exports increasing by \$50 billion.

- (i) Using the demand and supply model below, explain the impact of the increase in value of trade on Country Y's exchange rate in 2023. Complete the diagram below to support your answer.

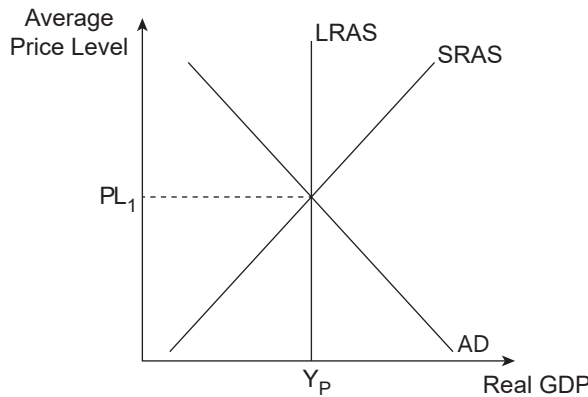
Foreign Exchange Market for Country Y Dollars



(4 marks)

- (j) Using your answer from part 4(i), explain the likely impact of the change in the exchange rate on aggregate supply in Country Y. Complete the diagram below to support your answer.

Country Y



(3 marks)

5. Refer to the information below.

Policy makers in Country Z rely on both monetary and fiscal policy to manage its economy. They mainly relied on monetary policy for Years 1 to 3. However, they have recently announced that fiscal policy would be their key demand management tool in Year 4.

They also announced that they are considering two different approaches to stimulate the economy – either increasing payments to welfare recipients or employing more workers in the public healthcare system.

Table A

	<i>Macro economic targets</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4 (forecasts)</i>
Inflation levels (%)	2–3	2.1	1.8	1.5	1.3
Unemployment Rate (%)	4.5	5.0	5.7	6.0	6.3
GDP (% change)	3.5	2.8	2.2	1.5	0.7
Official Interest Rate (%)		2.5	1.5	0.35	0.1
Exchange rate (\$US)		0.73	0.71	0.69	0.62

(a) (i) State the relationship between the official interest rate and the exchange rate as seen in Table A.

_____ (1 mark)

(ii) Explain *one* likely cause of the relationship identified in part (a)(i).

_____ (2 marks)

(iii) Explain the likely impact of the change in the exchange rate from Year 1 to Year 3 on net exports.

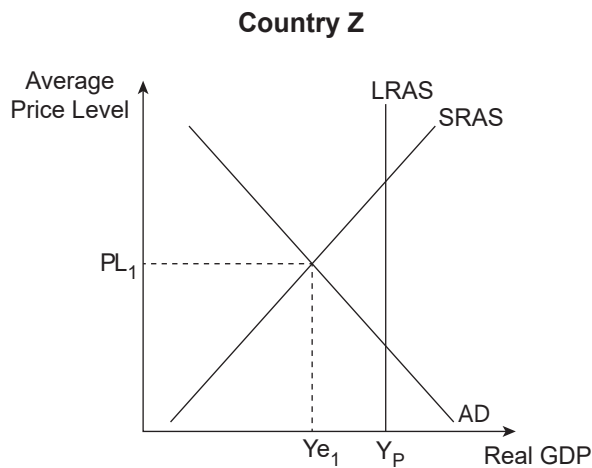
_____ (2 marks)

- (b) Outline *two* reasons why the changes in monetary policy from Year 1 to 3 could affect consumption expenditure.

Reason 1: _____
 _____ (1 mark)

Reason 2: _____
 _____ (1 mark)

- (c) The AD-AS diagram below represents economic conditions in Country Z in Year 1.



- (i) Illustrate the *intended* impact of the changes in monetary policy from Year 1 to Year 3 on the AD-AS diagram above. (1 mark)
- (ii) Explain one possible reason for the difference between the *intended* impact of monetary policy from Year 1 to Year 3 and the actual position of the economy in Year 3 (as shown in Table A).

 _____ (3 marks)

- (d) Evaluate the decision of policy makers to use fiscal policy, as their main policy instrument in Year 4.

 _____ (4 marks)

