Candidate surname | Other names

**Pearson Edexcel
Level 3 GCE**

Centre Number | Candidate Number

Time 1 hour 30 minutes

Paper reference **8EC0/01**

Economics A

**Advanced Subsidiary
PAPER 1: Introduction to Markets and Market Failure**

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- There are two sections in this question paper.
- Answer **all** questions in Section A.
- In Section B, answer **all** of questions 6(a) to 6(e) and **one** question from 6(f) or 6(g).
- Answer the questions in the spaces provided
  – *there may be more space than you need*.

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question*.
- Calculators may be used.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.
- Good luck with your examination.

Turn over ▶

Pearson

SECTION A

Answer ALL questions. Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ⊠. If you change your mind about an answer, put a line through the box ⊠ and then mark your new answer with a cross ⊠.

You are advised to spend 25 minutes on this section.

Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.

1 Since 2015, the government has invested £74 million on a flood defence scheme in the Calder Valley. The scheme will protect homes, businesses and jobs.

(Source: https://www.theguardian.com/uk-news/2020/feb/10/yorkshire-residents-criticise-delays-to-flood-defence-scheme)

(a) What are the characteristics of a private good?

(1)

☒ **A** Non-rivalrous and excludable

☒ **B** Non-rivalrous and non-excludable

☒ **C** Rivalrous and excludable

☒ **D** Rivalrous and non-excludable

(b) Explain why flood defences such as those in the Calder Valley are usually provided by the public sector.

(3)

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(Total for Question 1 = 4 marks)

2 The Common Agricultural Policy (CAP) is a system of minimum prices and other programmes covering farming, environmental measures and rural development. The CAP applied to British farmers before the UK left the EU in January 2020.
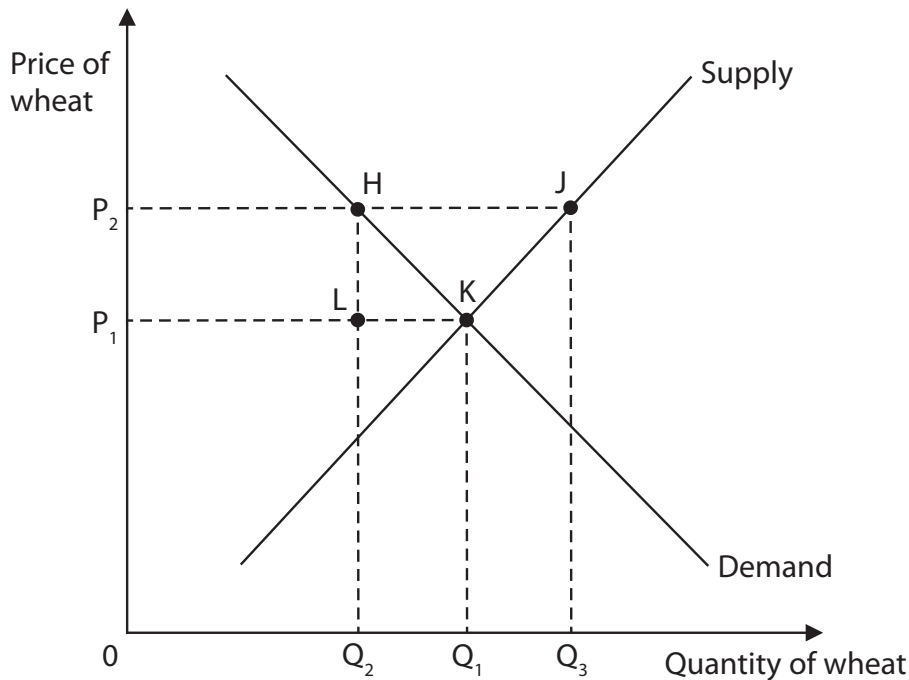
(Source adapted from: https://www.gov.uk/government/collections/common-agricultural-policy-reform)

(a) Define the term 'minimum price'.

(1)

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The diagram below shows the demand and supply curves for wheat in the European Union (EU).

The free market price of wheat is P_1. It had been agreed as part of the CAP to maintain a price of P_2 within the EU and to do so through intervention buying.

(b) In achieving a price of P_2, the amount spent on intervention buying by the EU would be

(1)

☒ **A** HKL

☒ **B** JHQ_2Q_3

☒ **C** LKJH

☒ **D** Q_1Q_2LK

(c) Explain **one** likely problem for the EU of maintaining prices at P_2.

(2)

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(Total for Question 2 = 4 marks)

3 The world's first cryptocurrency, Bitcoin is stored and exchanged securely on the internet through a digital ledger known as a blockchain. Bitcoins are divisible into smaller units known as satoshis.

(Source: https://www.coinbase.com/price/bitcoin)

(a) Which **one** of the following would be most likely to cause a country's currency to no longer be acceptable as a medium of exchange?

(1)

⊠ **A** It becomes harder to counterfeit

⊠ **B** It becomes unlimited in supply

⊠ **C** It is issued in smaller denominations

⊠ **D** It is more long lasting

(b) Explain how Bitcoin fulfils **one** function of money, apart from as a medium of exchange.

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(Total for Question 3 = 4 marks)

4 A large number of people should be vaccinated against a new virus, so that even those who are not vaccinated will benefit.

(a) With reference to the statement above, explain the difference between positive and normative statements.

(3)

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(b) Which **one** of the following explains how market failure might occur in a free market economy?

(1)

☒ **A** A net welfare loss results from intervention by the government

☒ **B** Firms enter the market in response to higher prices

☒ **C** Goods with positive externalities are underprovided

☒ **D** Prices rise when there is excess demand

(Total for Question 4 = 4 marks)

5 In March 2020, a substantial increase in the demand for flour resulted in the retail price of flour increasing. Despite the price rises, the supply of flour failed to keep up with the increased demand.

(a) Explain **one** reason why flour producers might find it difficult to increase quantity supplied in the short run.

(3)

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(b) A manufacturer has estimated that the price elasticity of supply of ice cream is +1.5. If the demand for ice cream rises and the price increases by 10%, which **one** of the following is the resulting percentage change in supply?

(1)

☒ **A** 0.15%

☒ **B** 1.5%

☒ **C** 6.67%

☒ **D** 15%

(Total for Question 5 = 4 marks)

TOTAL FOR SECTION A = 20 MARKS

SECTION B

Read Extracts A and B and Figure 1 before answering Question 6.

Answer ALL Questions 6(a) to 6(e) and EITHER Question 6(f) OR Question 6(g).

You are advised to spend 1 hour and 5 minutes on this section.

Question 6

The market for fish

Extract A

Total allowable catches of North Sea cod halved in response to falling stocks

In 2020, new lower limits on the quantity of cod that can be caught by the UK fishing fleet came into force. These limits on the fish catch, called total allowable catches (TACs), were agreed at the annual EU fisheries negotiations.

It was the last December EU meeting attended by the UK before it left the EU. It was　　5
agreed that cod catch limits will be cut by 50% in the North Sea, while reduced limits were agreed for cod in the Celtic Sea, Irish Sea and west of Scotland.

However, there were increases for other types of fish, with TACs for haddock in the North Sea rising by 23% and for sole rising by 19%.

UK Fisheries Minister George Eustice said: "This year there has been mounting scientific　　10
evidence suggesting that cod is being overfished in many parts of the northeast Atlantic and we have responded to conserve stocks".

These new regulations applied to the UK while it remained part of the Common Fisheries Policy. In the future it will become an independent coastal state and negotiate on fisheries with the EU and other coastal states such as Norway.　　15

(Source adapted from: https://www.independent.co.uk/news/business/news/north-sea-cod-stocks-quota-climate-change-brexit-a9252196.html)

Figure 1

Atlantic over-fishing: share of total allowable catch (TAC) in excess of scientific advice (2019)

Country	Excess TAC (%)	Excess TAC (tonnes)
Sweden	52.4	17 369
United Kingdom	24.3	106 925
Ireland	21.7	34 052
Denmark	19.7	49 914
Germany	18.0	20 620
The Netherlands	13.5	31 910
Belgium	10.4	3 009
France	9.4	27 230
Spain	6.6	16 689
Portugal	3.8	3 662
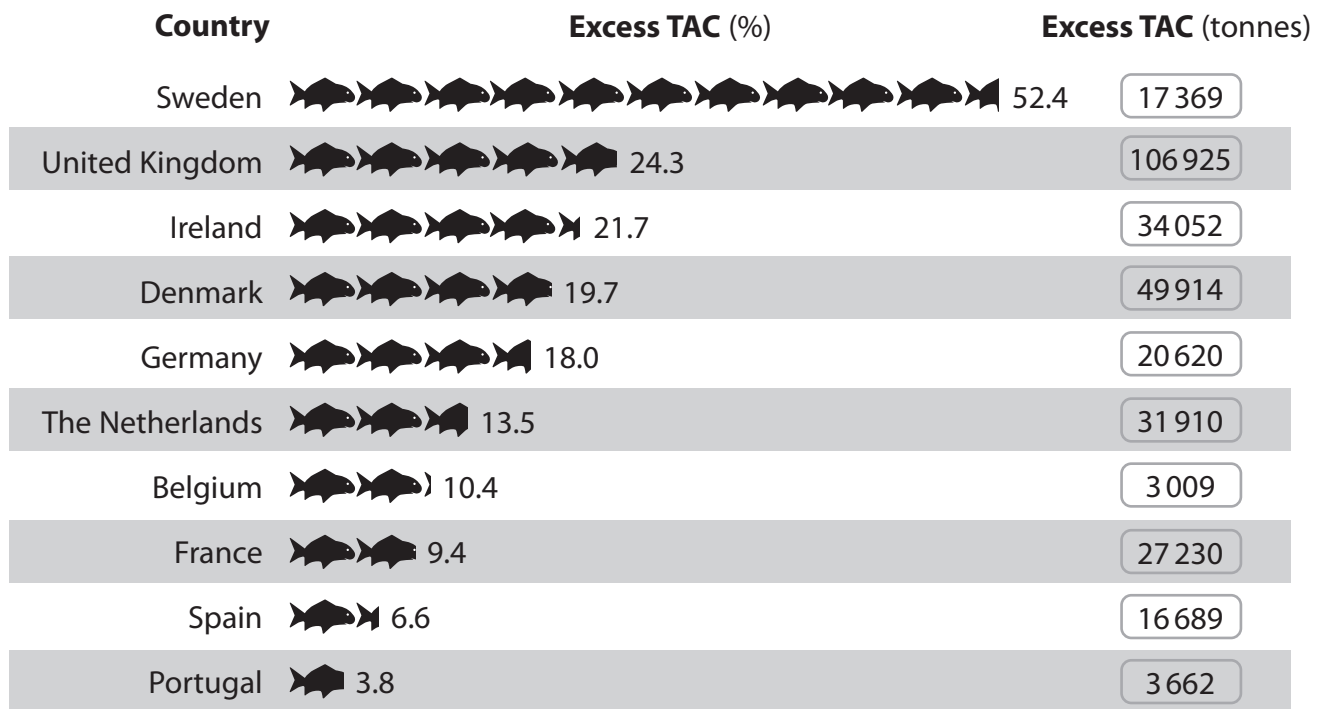
(Source adapted from: Statista 2018)

Extract B

The tragedy of the commons

The 'tragedy of the commons' may occur when there are common access resources (CARs). These are natural resources over which no private ownership has been established. Therefore, there are difficulties in excluding people from using or exploiting them. CARs include fisheries and common grazing lands. Oceans are so vast that it is impractical for one fishing company to establish ownership and control. This means that others cannot be prevented from exploiting the ocean. Economists have suggested that with the lack of ownership of these resources, private producers will act in their own self-interest and exploit CARs to maximise profit. This exploitation is unsustainable. In other words, CARs provide an opportunity for individuals to create profit, while creating negative externalities which impact on everybody else. This process is referred to as the 'tragedy of the commons'. 5

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The 'tragedy of the commons' is at the core of a range of problems that are relevant and threatening to natural resources, environments and human health. In the case of overfishing, fishing companies are not made accountable for the state of the ocean. They continue to fish as much as possible to maximise profit. Today, 90% of fish stocks are depleted. 15

The reason for such a wide range of problems is because there is an environmental cost for everything. The 'tragedy of the commons' is the outcome of the fact that every resource is limited on this planet, coupled with the rising level of demand for these resources. These issues are large-scale and require laws, regulation and international cooperation. 20

(Source adapted from: http://felixonline.co.uk/articles/2019-12-09-tragedy-commons-drama-planet-not-enjoying/)

6 (a) Explain the likely impact of the new 2020 TACs on the price of cod. Include a supply and demand diagram in your answer.

(5)

According to Extract B, lines 15–16, 'fishing companies are not made accountable for the state of the ocean. They continue to fish as much as possible to maximise profit'.

(b) Assess whether it is rational for fishing companies to behave in this way.

(10)

(c) With reference to the information provided and your own knowledge, explain **two** characteristics of private ownership in a free market economy.

(6)

Fish and chips are complementary goods with an estimated cross elasticity of demand of –8. Currently 950 000 bags of chips are sold in UK fish and chip shops each day.

(d) With reference to the information provided, calculate the new quantity demanded of bags of chips from fish and chip shops, following a 2% increase in the price of fish. You are advised to show your working.

(4)

The UK fishing industry employs about 24 000 people, more than half of them working in Scotland.

(e) Discuss the likely impacts on an economy of specialising in the fishing industry. Use a production possibility frontier diagram in your answer.

(15)

EITHER

(f) Some economists suggest that the market price of cod does not result in the socially optimum level of output. Evaluate the likely external costs from the over-fishing of cod. Use an appropriate diagram in your answer.

(20)

OR

(g) Other than using a TAC, evaluate the policy options which could be used to reduce market failure resulting from over-fishing. Use at least one appropriate diagram in your answer.

(20)

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(10)

P 6 6 1 1 2 A 0 1 5 2 8

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P 6 6 1 1 2 A 0 1 6 2 8

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(20)

Indicate which question you are answering by marking a cross in the box ⊠. If you change your mind, put a line through the box ⊠ and then indicate your new question with a cross ⊠.

Chosen question number: **Question 6(f)**   ⊠   **Question 6(g)**   ⊠

Write your answer here:

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(Total for Question 6 = 60 marks)

TOTAL FOR SECTION B = 60 MARKS
TOTAL FOR PAPER = 80 MARKS

P 6 6 1 1 2 A 0 2 8 2 8