## AQAE

Please write clearly in block capitals.

Centre number

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Candidate signature
I declare this is my own work.

## AS

## ECONOMICS

## Paper 1 The Operation of Markets and Market Failure

## Time allowed: 1 hour 30 minutes

## Materials

For this paper you must have:

- the Insert
- a calculator.


## Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Fill in the boxes at the top of this page.

| For Examiner's Use |  |
| :---: | :---: |
| Section | Mark |
| A |  |
| B |  |
| TOTAL |  |

- Answer all questions in Section A.
- Answer either Context 1 or Context 2 in Section B.
- You will need to refer to the Insert provided to answer Section B.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.


## Information

- The maximum mark for this paper is 70.
- The marks for questions are shown in brackets.
- No deductions will be made for wrong answers.


## Section A

Answer all questions in this section.

Only one answer per question is allowed.
For each question completely fill in the circle alongside the appropriate answer.
CORRECT METHOD $\bullet$ WRONG METHODS $\otimes \odot \infty$
If you want to change your answer you must cross out your original answer as shown.


If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.

| 0 | 1 |
| :--- | :--- | Choice is central to the economic problem because

A incomes are unequally distributed.
B most resources are scarce.


D people's wants are limited. 0

02 A fast food restaurant is willing to supply 3000 burgers a week at a market price of $£ 5$ a burger. The price elasticity of supply of burgers is 2 . If the market price falls to $£ 4$ a burger, the number of burgers that the restaurant will be willing to supply will be

A 1800
0
B 2700
C 3300


D 4200


| 0 | 3 | Figure 1 shows the long-run average cost curve (LRAC) for a firm. |
| :--- | :--- | :--- |

Figure 1


Which one of the following movements along the curve shows a reduction in diseconomies of scale?

A V to W


B X to W


C X to Y


D Z to Y $\square$

04 A government decides to increase its subsidy to rail services to encourage more people to travel by rail. The subsidy is most likely to be successful if rail travel has a

A demand that is elastic with respect to price.


B demand that is inelastic with respect to price.
C high positive income elasticity of demand.
D negative cross elasticity of demand with respect to car travel.

| $\mathbf{0}$ | $\mathbf{5}$ | A public good always has the characteristic that |
| :--- | :--- | :--- |

A consumption by one person does not reduce availability to others. $\square$
B it is provided free of charge by the government to all citizens. $\square$
C its consumption gives rise to positive externalities for others.
D the supply is funded from a government's tax revenue.

| 0 | 6 |
| :--- | :--- | competitive market?

A Limited consumer information and no product differentiation


B Low entry barriers and some product differentiation
C No entry barriers and low price-setting power
D No price-setting power and unlimited consumer information 0

| 0 | 7 |
| :--- | :--- | Weekly sales of doughnuts are 20000 and the market price is $£ 1.20$ per doughnut. The government introduces a new indirect tax of 15p per doughnut. Sales fall to 16000 a week and the price rises to $£ 1.30$ per doughnut.

The share of the total weekly tax that is borne by doughnut producers is

## A $£ 800$



B $£ 1000$


C $£ 1600$


D $£ 2400$

| 0 | 8 |
| :--- | :--- |
| An economist puts forward a hypothesis, collects evidence to test it, and then accepts, |  | modifies, or rejects the hypothesis.

This is an example of
A a positive policy statement.


B economic methodology.
C how value judgements influence economic decisions.
D normative economics. $\square$

| 0 | $\mathbf{9}$ | A government plans to plant a new forest to provide a recreation facility and help combat |
| :--- | :--- | :--- | climate change.

Estimates of the costs and benefits are shown in Table 1.

## Table 1

|  | Private costs | Social costs | Private <br> benefits | Social <br> benefits |
| :--- | :---: | :---: | :---: | :---: |
| $£$ million | 13 | 9 | 14 | 16 |

From the figures in Table 1, it can be concluded that the forest project will have

A negative production externalities of $£ 9$ million.


B positive consumption externalities of $£ 16$ million.
C positive production externalities of $£ 4$ million.
D total externalities of $£ 25$ million.

| 1 | $\mathbf{0}$ The demand for cocoa is derived from the demand for chocolate. When the demand for |
| :--- | :--- | chocolate falls, the most likely result is a

A movement along the demand curve for cocoa. $\square$
B movement along the supply curve for cocoa.


C shift left of the supply curve for cocoa.
D shift right of the demand curve for cocoa.

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O
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| 1 | 1 | Table 2 shows the total output of a small firm and the numbers of workers employed in |
| :--- | :--- | :--- | each of four months.

Table 2

| Month | Workers | Total output |
| :--- | :---: | :---: |
| January | 12 | 2400 |
| February | 11 | 2300 |
| March | 14 | 2700 |
| April | 13 | 2500 |

Which one of the following is a true statement about production and labour productivity during this period?

A Both production and labour productivity rose between February and March
B Both production and labour productivity were higher in April than January
C Labour productivity rose but production fell between January and February
D March had both the highest production and the highest labour productivity

## Turn over for the next question

| 1 | 2 |
| :--- | :--- | Figure 2 shows supply and demand in the market for beef. $D_{1}$ shows the initial demand and $S_{1}$ the initial supply curve.

Figure 2


Which one of the following combinations of events would be most likely to cause demand to shift from $D_{1}$ to $D_{2}$ and supply from $S_{1}$ to $S_{2}$ ?

A A fall in the price of chicken and an increase in the price of animal feed
B A fall in workers' wages and a shift in preferences towards vegetarian food
C Higher disposable incomes and a fall in farm productivity
D Higher rents for farmland and health warnings about eating red meat

13 A firm normally has some fixed and variable costs in the short run. However, in the long run

A all costs become fixed.
B fixed costs become variable.
C fixed costs become very small.
D variable costs become fixed.

| 1 | 4 |
| :--- | :--- | The price mechanism allocates resources by

A allowing prices to rise and ration demand when there is a surplus in the production of a good.


B preventing firms with monopoly power from exploiting consumers and charging a price above the competitive price.

C setting prices to ensure that the opportunity cost of producing a good is

D setting relative prices to determine the quantity of factors of production used in producing each good.

| 1 | 5 |
| :--- | :--- | A firm manufactures and sells fresh fruit drinks. The firm sells 200 bottles of fruit drink each week; its weekly total costs are $£ 540$, which includes $£ 300$ of fixed costs. The drink is sold at $£ 4$ a bottle.

A rival firm drops out of the market and sales increase to 250 bottles a week. Other things remaining the same, profit per week increases by

A $£ 65$
B $£ 125$
C £140


D £400

| 1 | 6 |
| :--- | :--- | market?

A Government subsidies to small firms $\square$
B Higher labour mobility between different industries


C New technology that increases the scope for economies of scale $\square$
D Reduced spending on advertising by firms already in the market


| 1 | $\mathbf{7}$ | The cross elasticity of demand for chips with respect to the price of rice is positive. It can |
| :--- | :--- | :--- | be concluded that chips and rice are

A inferior goods.
B jointly demanded.
C normal goods.
D substitute goods. $\square$

| $\mathbf{1}$ | $\mathbf{8}$ | A firm that is a pure monopoly can result in market failure because |
| :--- | :--- | :--- |

A consumers lack information on alternative suppliers.


B products will be identical.


C the firm does not experience economies of scale.


D the firm's output is too low. $\square$

| 1 | 9 | A shift left in the supply curve causes a market to be in disequilibrium at the original |
| :--- | :--- | :--- | market price because

A consumers cannot buy as much as they would like. $\square$
B consumers no longer wish to buy the same quantity.
C firms are willing to supply more of the good.
D firms experience an increase in their stocks of the good.

20 Many goods are sold in plastic packaging that has harmful effects on the environment. In Figure 3, $\mathrm{D}_{1}$ and $\mathrm{S}_{1}$ are the free market demand for and supply of plastic packaged goods. $S_{2}$ would be the supply if firms took account of the cost to the environment of plastic packaging.

Figure 3


The government decides to implement a policy that would result in production moving from the free market level at $Q_{1}$ to the social optimum at $Q_{2}$. Which one of the following policies is most likely to achieve the government's objective?

A A subsidy at the rate $P_{1} P_{3}$


B A subsidy at the rate $P_{2} P_{3}$


C A tax at the rate $P_{2} P_{1}$


D A tax at the rate $P_{2} P_{3}$

## Section B

Look at the Insert and choose to answer EITHER Context 1 OR Context 2.
Answer EITHER Questions 21 to 26 in the spaces below
OR
Questions 27 to 32 on pages 23 to 32 of this answer booklet.
There is a total of 50 marks for either context.

Shade the circle below to indicate which context you have answered.

| Context | $\mathbf{0}$ | $\mathbf{1}$ | 0 |
| :--- | :--- | :--- | :--- |$\quad$| Context | $\mathbf{0}$ | $\mathbf{2}$ | 0 |
| :--- | :--- | :--- | :--- |

WRONG METHODS $\propto \odot \otimes$ CORRECTMETHOD

## EITHER

## Context 1

Total for this context: 50 marks

## WATER

Use the Insert provided to study Questions 21 to 26 and Extracts A, B and C, and then answer the questions in the spaces which follow.

21 Define 'profit' Extract B (line 9).
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If a litre of water costs 0.4 p , calculate how much money would be saved in a week if a family of four each had a shower every day instead of a bath.
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Turn over for the next question

| 2 | 3 |
| :--- | :--- | Use Extract A to identify two significant points of comparison between the average annual water usage of households with and without a water meter.

Comparison 1
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Comparison 2
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Extra space

| 2 | 4 | Extract C (line 20) states: 'Perhaps a maximum price should be set for water'. |
| :--- | :--- | :--- |

Draw a diagram to show the impact on the market for water of setting a maximum price below the equilibrium.

| 2 | 5 |
| :--- | :--- | competitive markets... Only businesses can choose their water supplier'.

Explain how firms in the water industry could compete to attract businesses or other customers.
[10 marks]
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26 Extract C (line 9) states: 'When people pay according to quantity used, they are less likely to be wasteful'.

Use the extracts and your knowledge of economics to assess whether all households should pay according to the amount of water they use.
[25 marks]
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\text { Do not answer Context } 2 \text { if you have answered Context } 1 .
$$

## OR

## Context 2

Total for this context: $\mathbf{5 0}$ marks

## ALCOHOL

Use the Insert provided to study Questions 27 to 32 and Extracts D, E and F, and then answer the questions in the spaces which follow.

| 2 | 7 |
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| Define 'income' Extract $F$ |  | (line 10).

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28 According to Extract E (lines 6-7), the price of a standard bottle of whisky had to rise from $£ 10$ to $£ 14$ in a discount supermarket, as a result of minimum unit pricing (MUP).

If the demand for whisky fell by $6.3 \%$ in the first year as a result of the price change, calculate the price elasticity of demand for whisky, to two decimal places.
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29 Use Extract D to identify two significant features of the affordability of alcohol index for the UK, over the period shown.

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Feature 2
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Extra space $\qquad$
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| 3 | 0 | Extract E (lines 2-3) states: 'The minimum age for buying alcohol is 18 , although in |
| :--- | :--- | :--- | some countries, such as the US, the minimum age is 21 '.

Draw a diagram to show the impact on the market for alcohol of raising the age for buying alcohol in the UK from 18 to 21.


| 3 | 1 |
| :--- | :--- | subject to high indirect taxes'.

Explain the likely effects of imposing indirect taxes on alcohol.
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| 3 | 2 | Extract F (lines 20-21) states: 'Cheap alcohol is wrecking lives and livelihoods in England |
| :--- | :--- | :--- | as well as Scotland'.

Use the extracts and your knowledge of economics to assess whether a minimum price for alcohol should be introduced in England and Northern Ireland.
[25 marks]
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END OF QUESTIONS





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