## AQAE

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Forename(s)
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## AS

## ECONOMICS

## Paper 1 The Operation of Markets and Market Failure

## Monday 11 May 2020 <br> Morning <br> 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 | A resource must be scarce if |
| :--- | :--- | :--- |

A it has an opportunity cost.


B it is non-renewable. 0

C there is a high demand for it. 0

D there is a small quantity supplied. 0

| $\mathbf{0}$ | $\mathbf{2}$ | Figure 1 shows demand (D) and supply (S) in the market for electric cars. |
| :--- | :--- | :--- | Demand is initially at $D_{1}$ and supply at $S_{1}$.

Figure 1


Other things remaining the same, which one of the following combination of events could have caused demand to shift from $D_{1}$ to $D_{2}$ and supply from $S_{1}$ to $S_{2}$ ?

A Greater availability of roadside chargers for electric cars and a rise in workers' wages

B Higher petrol prices and an increase in workers' productivity
C Introduction of a road pricing scheme for all vehicles and higher diesel fuel prices

D Lower rail and bus fares and the use of new technology for electric car production
$\square$

| $\mathbf{0}$ | $\mathbf{3}$ Government failure must have occurred when government intervention |
| :--- | :--- | :--- |

A causes income inequality to increase.


B has unintended consequences.
C is based on imperfect information.
D reduces total welfare in the economy.

| 0 | 4 |
| :--- | :--- | month.

## Table 1

| Price of rice | Quantity of rice <br> (000s packets) | Price of pasta | Quantity of pasta <br> (000s packets) |
| :---: | :---: | :---: | :---: |
| $£ 2.00$ | 100 | $£ 1.50$ | 40 |
| $£ 2.25$ | 80 | $£ 1.50$ | 50 |

When the price of rice rises from $£ 2.00$ to $£ 2.25$, the cross elasticity of demand for pasta with respect to the price of rice is

A -2.0


B -0.5


C +0.5


D +2.0


| $\mathbf{0}$ | $\mathbf{5}$ The number of film production companies in a city increases. As a result, the pool of |
| :--- | :--- | :--- | workers skilled in making films grows. Companies experience a reduction in their average costs.

The fall in average costs results from

A a reduction in diseconomies of scale.
B an increase in managerial economies of scale.
C the existence of external economies of scale.
D the presence of technical economies of scale.

| 0 | 6 |
| :--- | :--- |

Table 2

| Output | Total cost $(£)$ | Profit $(£)$ |
| :---: | :---: | :---: |
| 50 | 1000 | 1000 |
| 100 | 1800 | 1700 |
| 150 | 2400 | 2400 |

When the firm increases its output from

A 50 to 100 , the price falls by $£ 2$
B 50 to 100 , the price falls by $£ 3$
C 100 to 150 , the price falls by $£ 2$
D 100 to 150 , the price falls by $£ 3$

| $\mathbf{0}$ | $\mathbf{7}$ | Figure $\mathbf{2}$ shows the production possibility frontier for an economy producing only two |
| :--- | :--- | :--- | goods: chickens and cabbages.

Figure 2


Which one of the following statements is true?
A From the information given, it is impossible to determine whether point $E$ is allocatively efficient

B From the information given, it is impossible to determine whether
point $E$ is productively efficient
C Point $E$ is productively and allocatively efficient


D Point E is productively efficient but allocatively inefficient

| $\mathbf{0}$ | $\mathbf{8}$ | In the market for apples, at the current market price of $£ 3$ per kilo, consumers buy |
| :--- | :--- | :--- | 5000 kilos and farmers produce 6000 kilos each week.

It can be concluded that

A consumers are unaware of the positive externalities from eating apples.


B the government must have set a maximum price for apples.


C the prices of substitute fruit such as oranges and pears have risen. $\square$
D there is disequilibrium in the apple market and the price is likely to 0 fall.

| $\mathbf{0}$ | $\mathbf{9}$ |
| :--- | :--- | An online streaming firm increased its paying subscribers by $300 \%$ over a 4-year period. The firm's share of the total time people spent watching television doubled and profits grew rapidly.

Which one of the following is the most likely explanation for the firm's success?

A A low concentration ratio in the industry meant that the firm faced
 little competition

B A low income elasticity of demand enabled the firm to raise the
 price of its subscription and increase its profits

C The firm was able to cut average costs by producing and selling a homogeneous product

D The firm was innovative and this increased barriers to entry for firms wishing to join the industry


| $\mathbf{1}$ | $\mathbf{0}$ Which one of the following statements about price elasticity of supply is correct? |
| :--- | :--- | Price elasticity of supply

A increases when a firm's labour costs increase.
B is affected by the amount of spare capacity.


C measures the responsiveness of price to a change in supply.


D tends to be lower in the long run than in the short run.


| 1 | 1 | Antonio sells ice creams in the local park. In a typical week, he sells 500 ice creams at $£ 2$ |
| :--- | :--- | :--- | each and his total costs are $£ 700$. One week he does not work, so he sells no ice creams but his total costs are $£ 200$.

What are his variable costs in a typical week?

A £200


B $£ 300$


C $£ 500$
D $£ 700$

122 Figure 3 shows the market demand $\left(D_{1}\right)$ and supply ( S ) of loft insulation material. If consumers have full information about the benefits of insulating their lofts, demand will be $D_{2}$.

Figure 3


There is underproduction, $Q_{2}-Q_{1}$, of loft insulation material because

A at the social optimum, $Q_{2}$, the price would be too high.
B firms have no incentive to increase output beyond $Q_{1}$.
C firms lack information about the external benefits of loft insulation.
D the government has failed to set a minimum price for loft insulation. $\square$

| 1 | 3 | A firm producing frozen foods has collected statistics on recent trends in sales of oven |
| :--- | :--- | :--- | chips, as shown in Table 3.

Table 3

| Year | Average number of bags of oven chips <br> sold per week | Average real income of <br> customers <br> $(2018$ prices $)$ |
| :---: | :---: | :---: |
| 2018 | 7800 | $£ 23000$ |
| 2019 | 7600 | $£ 22000$ |

These statistics suggest that oven chips

A are a normal good.


B are an inferior good.
C have an income elasticity of demand greater than 1.
D have an income elasticity of demand less than 0 .

| 1 | 4 |
| :--- | :--- | Which one of the following helps to explain why profits are likely to be lower in a perfectly competitive market than in a monopoly market?

A A firm with monopoly power doesn't need to spend money on research and development to improve its products


B Firms in a perfectly competitive market are more likely to experience diseconomies of scale

C In a monopoly, a firm can increase the price of the product by limiting its output


D In a perfectly competitive market, firms differentiate their products to compete with rivals and achieve brand loyalty

| 1 | 5 | Land is in composite demand and can be used to build houses or to provide playing fields. |
| :--- | :--- | :--- | When the demand for playing fields increases, there will be

A a decrease in the price of new houses. $\square$
B a decrease in the supply of new houses.
C an increase in demand for new houses.
D an increase in output of new houses.

16 A government decides to set a minimum price for plastic bottles of water above the current market price. The most likely impact of the scheme will be

A a rise in consumption of plastic bottles of water.


B a shortage of plastic bottles of water if the price elasticity of supply 0 is zero.

C excess stocks of plastic bottles of water.


D no excess supply of plastic bottles of water if the price elasticity of demand is zero.


| 1 | $\mathbf{7}$ | The production of a good generates positive externalities. This means that at the free |
| :--- | :--- | :--- | market equilibrium

A the good will be under-produced.
B the price of the good will be too low.
C there will be excess demand for the good.
D the supply of the good will be inelastic.

| 1 | 8 |
| :--- | :--- |
| The percentage share of total income received by the poorest $20 \%$ of households in an |  | economy rose over one year. Over the same period, the share received by the richest $20 \%$ of households fell whilst national income and population remained constant.

It can be concluded that

A in this economy, the distribution of income became more equitable. $\square$
B the incomes of some households moved closer to the average income of the economy.

C the incomes of the middle $20 \%$ of households in the income distribution did not change.

D the gap between the income of the richest household and the poorest household became smaller.

| $\mathbf{1}$ | $\mathbf{9}$ | A firm makes more use of division of labour when organising its workforce. The most likely |
| :--- | :--- | :--- | result will be

A higher labour productivity. $\square$
B less capital equipment per worker.
C lower labour turnover.
D lower wage rates.

20 In a free market, the consumption of a good leads to negative externalities. If left to the free market, how would price and output compare to the social optimum?

A The price and output would be higher


B The price and output would be lower
C The price would be higher and the output lower
D The price would be lower and the output higher
$\square$


## 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 21 to 30 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 $\propto$ CORRECTMETHOD

## EITHER

## Context 1

Total for this context: 50 marks

## BUS TRAVEL

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.

| 2 | 1 |
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| 2 | 2 | Use Extract A to calculate the difference in the median male and female take-up rates of |
| :--- | :--- | :--- | concessionary travel schemes for the elderly in England for the years shown.

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| 2 | 3 |
| :--- | :--- | Use Extract A to identify two significant points of comparison between the take-up of concessionary travel schemes by males and females in England over the period shown.

Comparison 1
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Comparison 2 $\qquad$
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| 2 | 4 |
| :--- | :--- | areas.'

Draw a supply and demand diagram to show the effects on the market for bus travel of the government providing a subsidy. The total amount of government spending on the subsidy should be labelled clearly.


| 2 | 5 |
| :--- | :--- | have been falling in recent years.'

Explain two factors which could lead to an increase in the demand for bus travel in the future.
[10 marks]
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26 Extract C (lines 16-17) states: 'Perhaps the time has come to stop free bus travel for the elderly or to limit it to certain groups?'

Use the extracts and your knowledge of economics to evaluate whether the UK government should continue to provide free bus travel for all, some or no elderly people.
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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

## E-CIGARETTES

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 'social cost' in Extract E (line 7). |  |

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28 Use Extract D to calculate, to one decimal place, the difference between the mean male and female rates of cigarette smoking in Great Britain for the years shown.
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| 2 | 9 |
| :--- | :--- | cigarette smoking of males and females in Great Britain over the period shown.

Comparison 1 $\qquad$
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30 Extract E (lines 10-12) states: 'between 2006 and 2016, the price of tobacco rose by $43 \%$ more than general retail prices with the tax now being about $80 \%$ of the price.'

Draw a supply and demand diagram to show the effects on the market for cigarettes of the government imposing an indirect tax. The total amount of government tax revenue should be labelled clearly.

| 3 | 1 |
| :--- | :--- | smokers switching back to conventional cigarettes.'

Explain two factors which could lead to an increase in the demand for conventional cigarettes.
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| 3 | 2 |
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| Extract $F$ (lines 17-19) states: 'Should the UK government promote a particular brand of |  | e-cigarettes as a 'healthy alternative' to conventional cigarettes? Should the use of e-cigarettes be discouraged or has government intervention already gone far enough?'

Use the extracts and your knowledge of economics to evaluate whether the UK government should encourage, discourage or do nothing more to affect the use of e-cigarettes.
[25 marks]
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END OF QUESTIONS






## There are no questions printed on this page

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