



Please write clearly in block capitals.

Centre number

--	--	--	--	--

Candidate number

--	--	--	--

Surname

Forename(s)

Candidate signature

I declare this is my own work.

A-level ECONOMICS

Paper 3 Economic Principles and Issues

Time allowed: 2 hours

Materials

For this paper you must have:

- the insert
- a calculator.

Instructions

- Answer **all** questions.
- 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.
- 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 answer book. Cross through any work that you do not want to be marked.

Information

- The maximum mark for this paper is 80.
- The marks for questions are shown in brackets.
- No deductions will be made for wrong answers.

For Examiner's Use	
Section	Mark
A	
B	
TOTAL	



J U N 2 1 7 1 3 6 3 0 1

Section AAnswer **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



WRONG METHODS



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**

The average university graduate can expect to earn more over their working life than the average school leaver.

This is most likely to be explained by

A discrimination in the labour markets for non-graduates.**B** the higher marginal revenue productivity of graduates.**C** the higher price elasticity of demand for graduates.**D** the relatively low elasticity of supply of non-graduates.**[1 mark]****0 2**

Which one of the following statements regarding supply-side policies is correct?

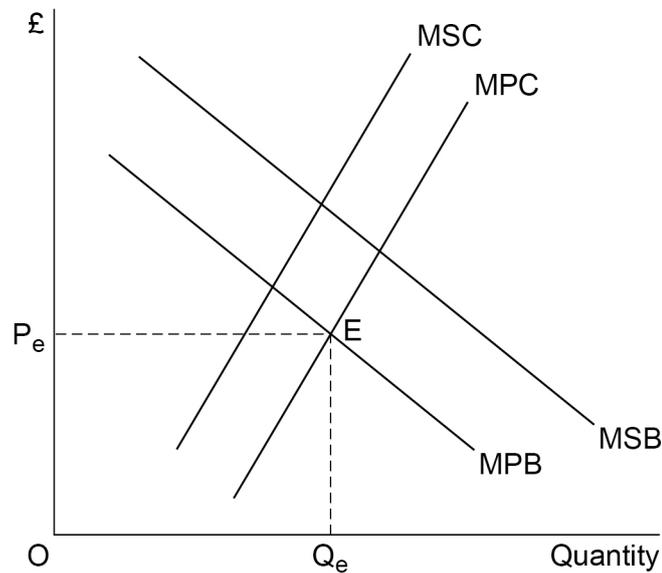
Supply-side policies

A can have microeconomic as well as macroeconomic effects on the economy.**B** can increase the potential output of an economy but not its trend rate of growth.**C** cannot be used to correct market failures and improve the operation of markets.**D** do not affect competitiveness or the current account of the balance of payments.**[1 mark]**

0 3

Figure 1 shows the marginal private benefit and marginal social benefit (MPB and MSB) curves and the marginal private cost and marginal social cost (MPC and MSC) curves in the market for a good.

Figure 1



The diagram represents a good with

- A** negative externalities in production and consumption.
- B** negative externalities in production and positive externalities in consumption.
- C** positive externalities in production and consumption.
- D** positive externalities in production and negative externalities in consumption.

[1 mark]

Turn over for the next question

Turn over ►



0 4

Which one of the following changes in macroeconomic performance is most likely to involve a trade-off, at least in the short-run, between the objectives of government macroeconomic policy?

- A** Economic growth increases and the deficit on the balance of payments on current account is eliminated
- B** Inflation declines to match its target rate and the government's budget position moves into balance
- C** The distribution of income becomes more equal as economic growth increases
- D** The government's budget deficit increases as the rate of unemployment is reduced

[1 mark]

0 5

Table 1 contains data for GDP per capita and the Human Development Index (HDI) for four countries in a given year.

Table 1

	GDP per capita (\$)	HDI
Country 1	32 860	0.45
Country 2	29 440	0.77
Country 3	23 230	0.51
Country 4	22 650	0.92

Which one of the following statements is most consistent with the data?

- A** Country 1 has the highest living standards of the four countries
- B** Country 2 has a higher rate of growth than countries 3 and 4
- C** Country 3 is the least developed of the four countries
- D** Country 4 has the highest life expectancy and literacy rates

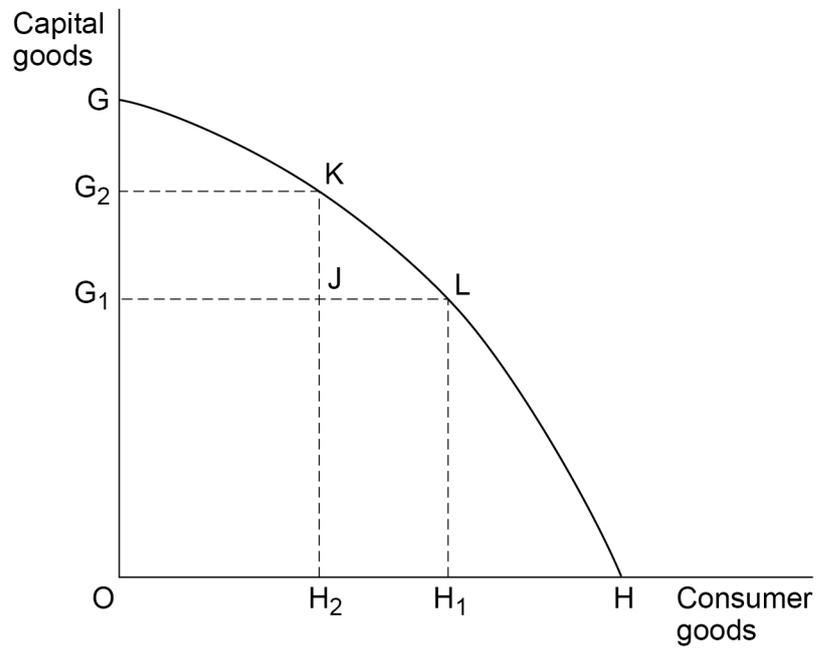
[1 mark]



0 6

Figure 2 shows the production possibility curve for an economy producing capital and consumer goods.

Figure 2



The opportunity cost of increasing the output of capital goods from G_1 to G_2 is shown by

A $H - H_2$

B H_2KLH_1

C $G_2 - G_1$

D $H_1 - H_2$

[1 mark]

Turn over for the next question

Turn over ►



0 7 Table 2 contains a simple balance sheet for a bank.

Table 2

Assets (£ billion)		Liabilities (£ billion)	
Cash	20	Customer Deposits	700
Cash held at Central Bank	70	Money owed to Central Bank	30
Securities held	130	Money owed to other banks	170
Loans	730	Shareholders Equity	100
Other assets	50		
Total assets	1000	Total liabilities	1000

From the balance sheet it can be concluded that this bank is

- A** a threat to financial stability because it holds no capital.
- B** an investment bank because it holds non-interest bearing cash.
- C** earning large profits because most of its assets are loans.
- D** most likely to be a commercial bank because its main liabilities are customer deposits.

[1 mark]

0 8 The free-rider problem in economics means that government intervention is necessary to prevent market failure in the supply of

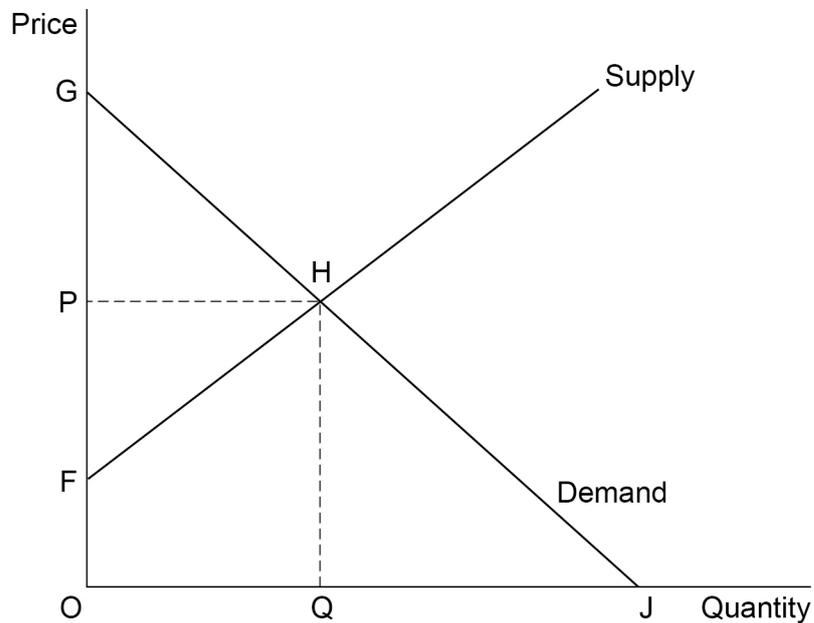
- A** inferior goods.
- B** merit goods.
- C** private goods.
- D** public goods.

[1 mark]



0 9

Figure 3 shows the demand curve (Demand) and the supply curve (Supply) for bus travel within a city. The initial market equilibrium price is P .

Figure 3

To reduce pollution, the city council pays bus companies to provide bus travel free of charge. As a result of this policy, consumer surplus will increase by the area

- A** OFHJ
B FGH
C OPHJ
D QHJ

[1 mark]

Turn over for the next question

Turn over ►



1 0

At the end of the previous financial year, a country had a national debt of £20 000 billion. The government's planned expenditure for the current year exceeds its projected income by £100 billion.

All other things being equal, which one of the following is most likely to enable the government to complete its planned expenditure and reduce the national debt?

Increasing its

- A** planned borrowing by more than £100 billion.
- B** projected income and borrowing by £100 billion.
- C** projected income by £100 billion and reducing new borrowing by £100 billion.
- D** projected tax revenue by more than £100 billion.

[1 mark]

1 1

A person is considering buying a used motorbike from a dealer on the internet. The motorbike is described as being in perfect condition and is being offered at a correspondingly high price.

In this situation, asymmetric information is most likely to lead the person to

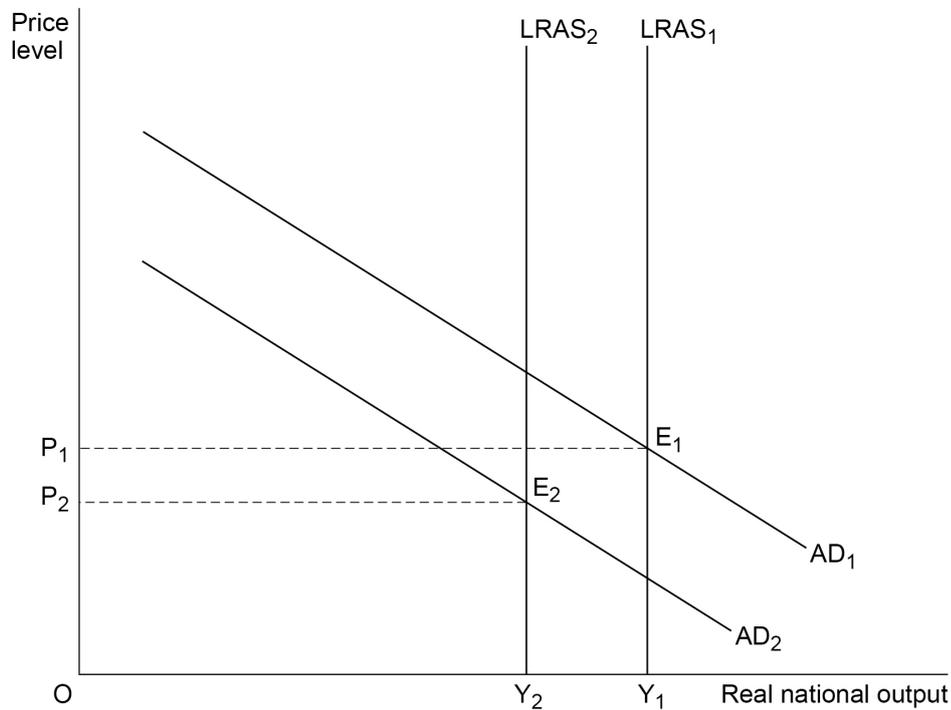
- A** buy the motorbike because they believe the price is justified by its condition.
- B** know more about the motorbike's market value than the dealer.
- C** maximise their utility by buying a cheaper used motorbike from a different dealer.
- D** not buy the motorbike because they do not know as much about the motorbike as the dealer.

[1 mark]



1 2

Figure 4 shows two aggregate demand (AD_1 and AD_2) curves and two long-run aggregate supply ($LRAS_1$ and $LRAS_2$) curves for an economy.

Figure 4

All other things being equal, which one of the following is the most likely explanation for the movement of the economy from E_1 to E_2 ?

- A** A decline in the capital stock resulting from a significant decline in bank funding for business investment
- B** An increase in net foreign investment by firms following a reduction in the rate of inflation
- C** An unexpected reduction in the rate of interest following a fall in the rate of inflation
- D** The growth of government borrowing to fund increased expenditure on infrastructure

[1 mark]

Turn over for the next question

Turn over ►



1 3

A feature of the UK government's workplace pension scheme is that employers are required to enrol their employees in the scheme unless the employees make a conscious decision to opt out and join another scheme.

An individual choosing to remain in their workplace pension scheme is an example of a person

- A** accepting the default choice.
- B** acting irrationally by ignoring an economic incentive.
- C** being anchored by a previous financial decision.
- D** using a rule of thumb to make the choice.

[1 mark]**1 4**

The Bank of England's Monetary Policy Committee increases Bank Rate to reduce the risk of an increase in inflationary pressure in the economy. All other things being equal, which one of the following is most likely to result from the policy change?

- A** Consumption will increase since house prices will rise and increase wealth.
- B** Investment will increase as the return on investment projects rises.
- C** Savings will increase as interest rates rise in real terms.
- D** The exchange rate will fall as a result of increased capital inflows.

[1 mark]**1 5**

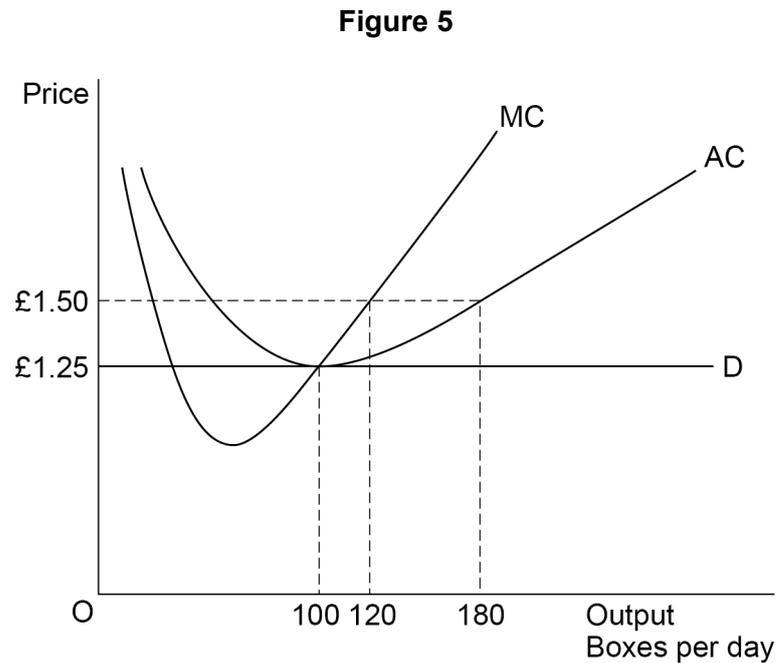
An increase in the national minimum wage may be used to make the distribution of income more equal. Such a policy is most likely to be effective when the elasticity of demand for labour in low-paid work is

- A** elastic.
- B** inelastic.
- C** perfectly elastic.
- D** unitary elastic.

[1 mark]

1 6

Figure 5 shows the demand (D) curve and the average and marginal cost (AC and MC) curves for a firm operating in a perfectly competitive market for eggs.



The firm is in equilibrium at the initial market price of £1.25 for a box of 6 eggs. If the market price increases to £1.50 for a box of eggs the firm will

- A** have a marginal revenue of £0.25.
- B** increase its average revenue by 20%.
- C** make supernormal profits in the long run.
- D** sell 180 boxes per day in the short run.

[1 mark]

Turn over for the next question

Turn over ►



1 7**Table 3** contains labour market data, in millions, for the UK in 2019.**Table 3**

Population aged 16 years and over	53.3
Economically active labour force	34.3
Total employment	33.0
Total unemployment	1.3

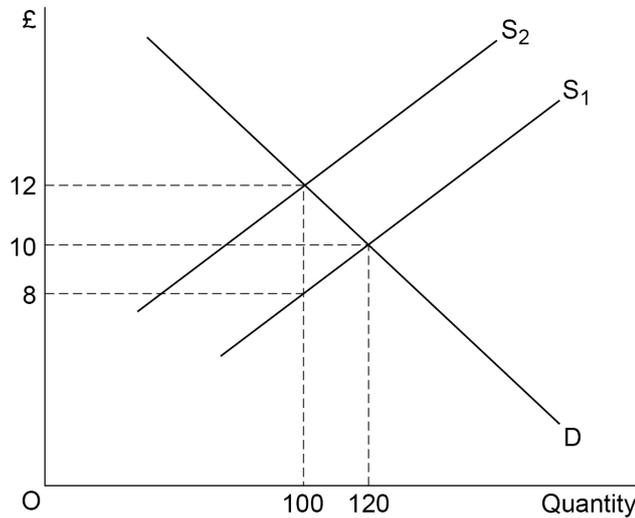
Source: ONS

Which one of the following, calculated in accordance with international guidelines, represents the UK's unemployment rate in 2019?

A 2.4%**B** 3.7%**C** 3.8%**D** 4.0%**[1 mark]**

1 8

Figure 6 represents the market for sugar in a country. It shows the demand (D) curve and two supply (S_1 and S_2) curves in the market for sugar before and after the imposition of an indirect tax on sugar.

Figure 6

According to **Figure 6**, which one of the following combinations: A, B, C, or D, is correct?

	Change in price %	Government tax revenue generated (£)	
A	20	200	<input type="radio"/>
B	20	400	<input type="radio"/>
C	50	200	<input type="radio"/>
D	50	400	<input type="radio"/>

[1 mark]

Turn over for the next question

Turn over ►



1 9

According to the accelerator process, a slowdown in the rate of growth of national income will lead to a fall in the

A level of investment.

B marginal propensity to save.

C rate of interest.

D value of the multiplier.

[1 mark]**2 0**

A monopolistically competitive firm's demand curve for good X has a price elasticity of demand of minus 1.0 throughout its entire range. All other things being equal, which one of the following is most likely to result in an increase in the firm's profits?

A A decrease in the cost of producing the good

B A decrease in the price of the good

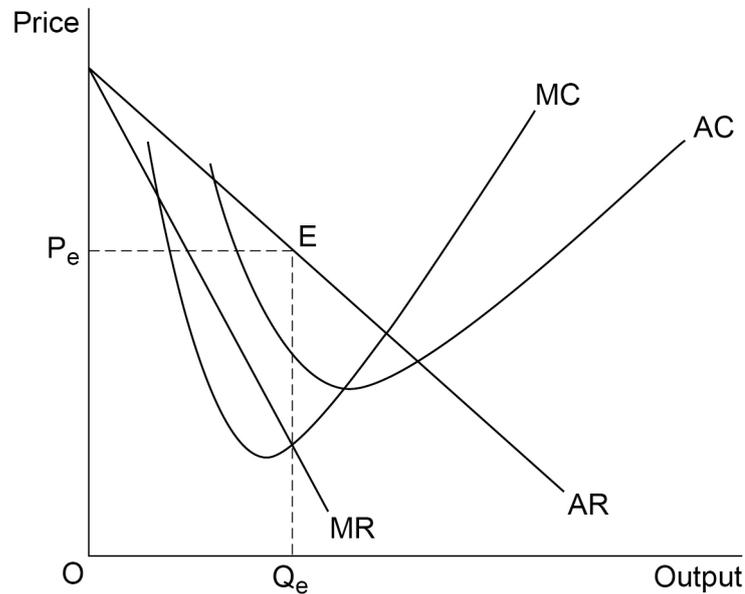
C An increase in the price of the good

D An increase in the scale of its operation

[1 mark]

2 1

Figure 7 shows the average and marginal revenue (AR and MR) curves and the average and marginal cost (AC and MC) curves for a firm. The firm is in equilibrium producing an output of Q_e .

Figure 7

From the diagram it can be inferred that the

- A** firm is a price taker and will reduce its supply if the market price falls below P_e .
- B** firm is making abnormal profits but this will not attract new firms into the market because the firm has a monopoly.
- C** firm is maximising its abnormal profit and has no incentive to expand its production.
- D** firm's abnormal profit will lead it to expand its production and shift its market supply curve to the right.

[1 mark]

Turn over for the next question

Turn over ►



2 2

Which one of the following combinations of possible shocks: A, B, C, or D, is most likely to move an economy from a negative output gap to a positive output gap?

An unexpected increase in

- A** productivity growth combined with a larger than expected decrease in inflation.
- B** the exchange rate combined with an unexpected fall in business confidence.
- C** the government's budget surplus combined with a downturn in world trade.
- D** the marginal propensity to consume combined with a fall in the exchange rate.

[1 mark]**2 3**

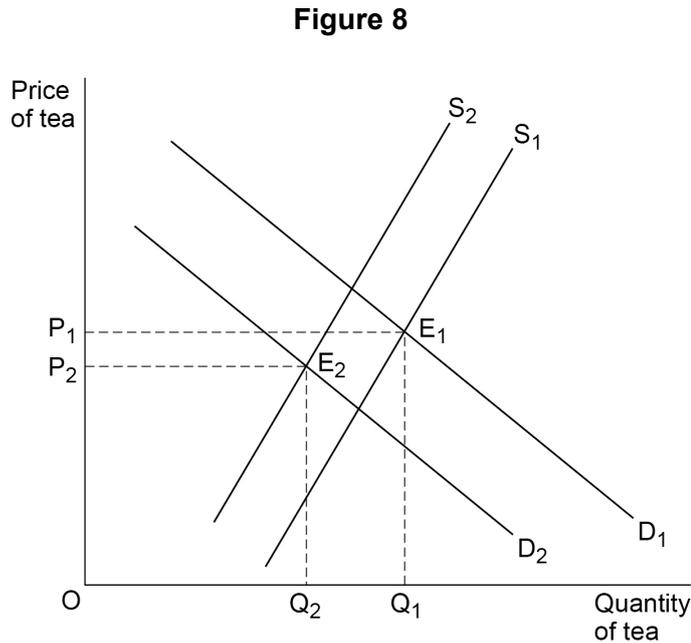
All other things being equal, which one of the following is the most likely consequence of technological innovation in the production process by the firms within an industry?

- A** A decrease in the number of firms in the industry
- B** A reduction in firms' unit costs of production
- C** The elimination of entry barriers into the industry
- D** The invention of a product that did not previously exist

[1 mark]

2 4

Figure 8 shows two demand (D_1 and D_2) curves and two supply (S_1 and S_2) curves in the market for tea.



Tea and coffee are substitutes. All other things being equal, which one of the following is the most likely explanation of the move from E_1 to E_2 in the market for tea?

- A** A fall in the price of tea and a rise in productivity in coffee production
- B** A rise in the price of coffee and an increase in the cost of producing tea
- C** An increase in competition in the market for tea and a fall in the price of coffee
- D** The removal of a subsidy to tea producers and a fall in the price of coffee

[1 mark]

2 5

In 2019, an economy operating at full capacity on its long-run aggregate supply curve grew at its trend growth rate of 5% per annum. It had a national income of £200 billion. In 2020, the economy experienced 2% actual growth.

It follows that in 2020 there was

- A** a negative output gap equal to £4 billion.
- B** a negative output gap equal to £6 billion.
- C** a positive output gap equal to £4 billion.
- D** a positive output gap equal to £6 billion.

[1 mark]

Turn over ►



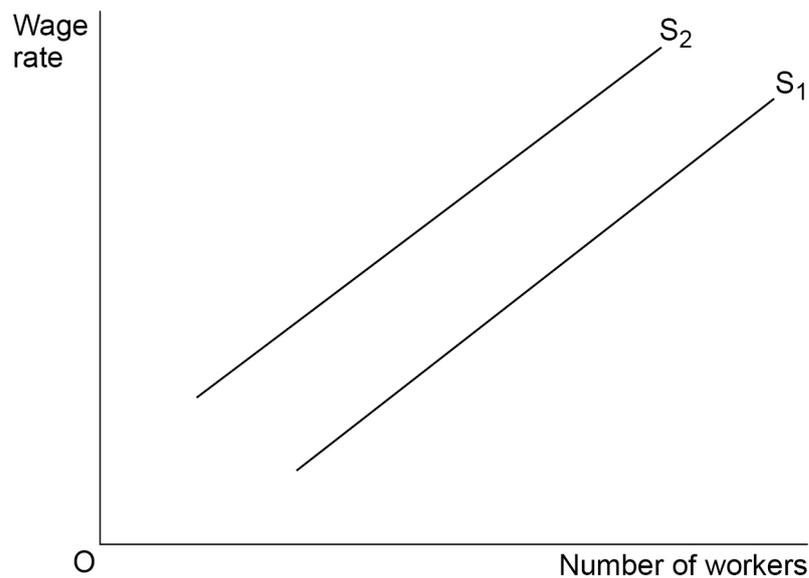
2 6 The money market is the financial market in which

- A** companies issue new shares to the public and financial institutions.
- B** dealers are able to trade foreign currencies.
- C** long-term company securities and government bonds are traded.
- D** short-term finance is provided for companies and governments.

[1 mark]

2 7 **Figure 9** shows two labour supply (S_1 and S_2) curves for workers qualified to the level necessary to be employed in a particular industry.

Figure 9



All other things being equal, the shift of the supply of labour curve from S_1 to S_2 is most likely to be explained by a reduction in

- A** job security for qualified workers in the industry.
- B** the average wage rate in the industry.
- C** the productivity of workers in the industry.
- D** the qualifications required by the industry.

[1 mark]



2 8

The index of real GDP for an economy was 100 in 2017, its base year, and 105 in 2020. In 2017, real GDP was £500 billion. The monetary value of real GDP for this economy in 2020 must therefore have been

A £395 billion.

B £475 billion.

C £525 billion.

D £605 billion.

[1 mark]**2 9**

Which one of the following is an expenditure switching policy that would help to reduce a deficit on the balance of payments on current account?

An increase in

A government expenditure on public goods.

B income tax to reduce consumer expenditure.

C quotas on exports of demerit goods.

D tariffs to raise the price of imports.

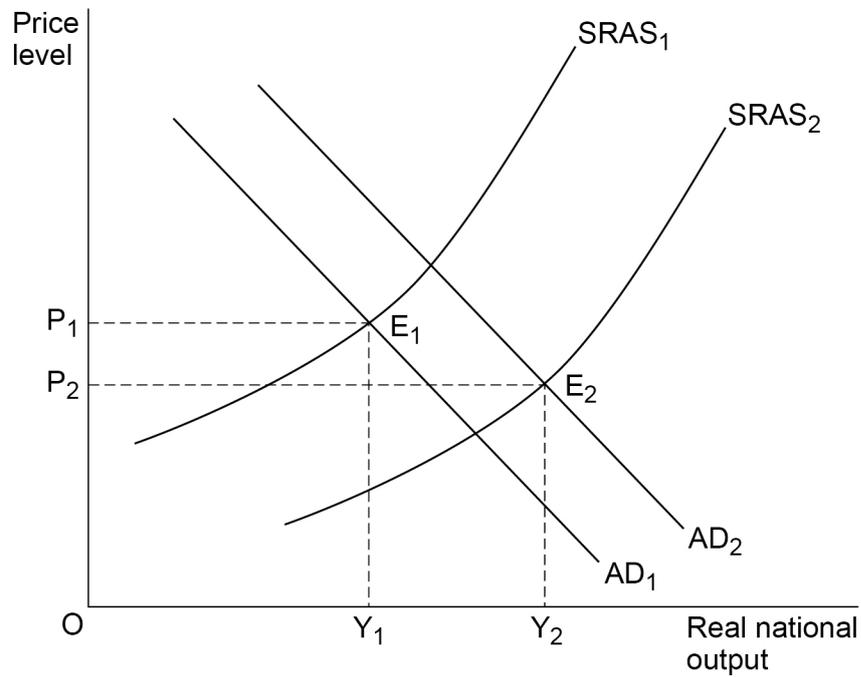
[1 mark]

Turn over for the next question

Turn over ►

3 0

Figure 10 shows two aggregate demand (AD_1 and AD_2) curves and two short-run aggregate supply ($SRAS_1$ and $SRAS_2$) curves for an economy.

Figure 10

All other things being equal, which one of the following is the most likely explanation for the movement of the economy from E_1 to E_2 ?

- A** A depreciation of the currency and an increase in interest rates
- B** A fall in the prices of raw materials and an increase in investment
- C** An increase in exports and the rate of Value Added Tax
- D** An increase in the supply of money and the level of money wages

30

[1 mark]**Turn over for Section B**

Section B

Answer **all** questions in this section.

Refer to the insert for Extracts A, B, C, D and E.

Total for this Investigation: 50 marks

Climate change – it is not too late

INVESTIGATION

Scenario

You are an economist working for an organisation which investigates the impact of climate change policies on the economy.

You have been asked to review the contribution of the UK to reducing greenhouse gas (GHG) emissions and the potential impact of climate change policies on the UK economy.

As part of this investigation, you are to provide answers to three questions.

Referring to the insert, study **Extracts A, B, C and D**, then use these and your knowledge of economics to help you answer Questions 31 and 32. There is also a news report, **Extract E**, which is to be used with the other extracts to help answer Question 33.

3 1 The UK government has set a target to reduce net greenhouse gas (GHG) emissions to zero by 2050.

To what extent, if at all, do the data suggest that to achieve its net-zero emissions target, the government should focus on reducing GHG emissions from the transport sector? You must use the data in **Extract C** to support your assessment.

[10 marks]

Turn over ►



There are no questions printed on this page

*Do not write
outside the
box*

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**



A-level ECONOMICS

Paper 3 Economic Principles and Issues

Insert

DO NOT WRITE ANY ANSWERS IN THIS INSERT. YOU MUST ANSWER THE QUESTIONS IN THE ANSWER BOOKLET PROVIDED.

Climate change – it is not too late

Questions 31 to 33

- **Extract A:** Greenhouse gas emissions: a global problem
- **Extract B:** The UK is reducing its greenhouse gas emissions but are they falling fast enough?
- **Extract C:** Selected indicators of greenhouse gas emissions in the UK
- **Extract D:** Solving the climate change crisis
- **Extract E:** Reducing greenhouse gas emissions has benefits as well as costs

There are no sources printed on this page

Extract A: Greenhouse gas emissions: a global problem

The Intergovernmental Panel on Climate Change (IPCC) reported that, unless something is done, greenhouse gas (GHG) emissions will cause global temperatures to rise by almost 3°C by the end of the century. The main GHG is carbon dioxide (CO₂). The IPCC believes that, unless the increase in average temperature is kept below 1.5°C, there will be significant costs. Sea levels will rise and more people will be affected by flooding. Some parts of the world will be exposed to drought. To avoid such problems, we need to use cleaner energy, adopt sustainable lifestyles and protect our forests.

Source: News reports, January 2020

Extract B: The UK is reducing its greenhouse gas emissions but are they falling fast enough?

In 2018, UK greenhouse gas emissions were 44% below 1990 levels even though the economy grew by 75%. In June 2019, the UK government introduced a legally binding net-zero GHG emissions target. A net-zero target means that some emissions are allowed provided they are removed from the atmosphere by natural or engineered methods. Reducing net emissions to 100% below their 1990 level is possible but will not be achieved unless effective policies are introduced. There will be a substantial economic cost, but the expansion of the green economy will add to growth and create jobs. Less pollution will improve people's health, reducing pressure on the NHS and social services.

Between 1990 and 2017, emissions from the energy supply sector fell by 60%. The decrease in emissions resulted from changes in the types of fuel used to produce electricity and improvements in technology.

Source: News reports, January 2020

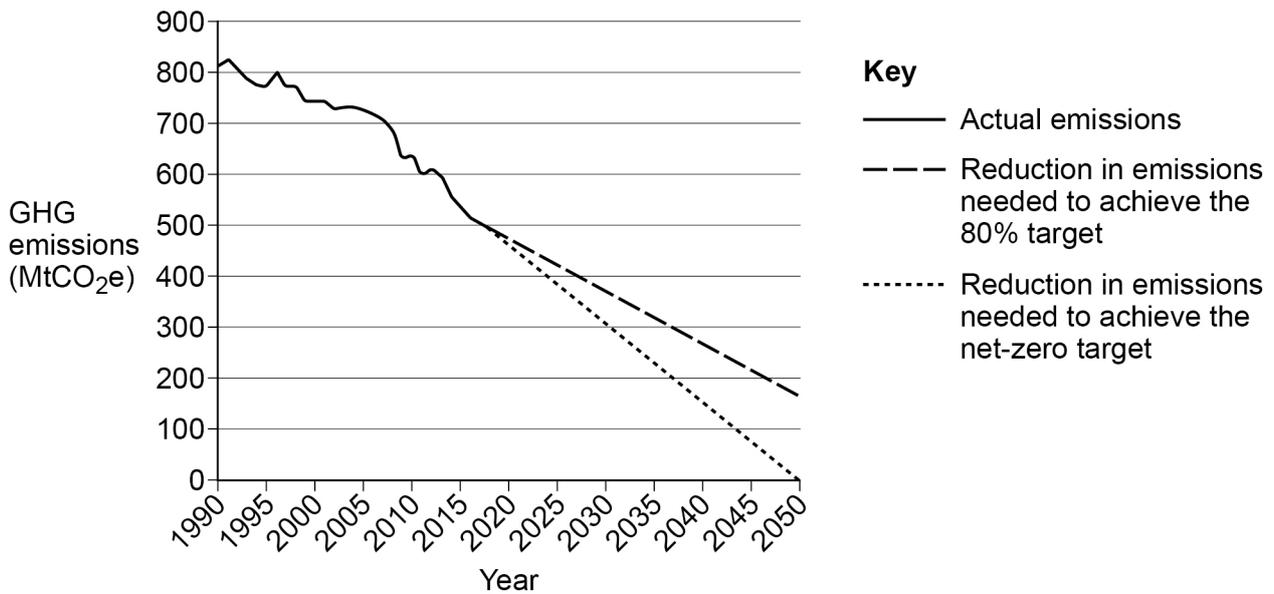
Turn over for the next Extract

Turn over ►

Extract C: Selected indicators of greenhouse gas emissions in the UK

Figure 1: The reduction in carbon emissions needed to achieve the 80% and 100% carbon-reduction targets by 2050

The Climate Change Act of 2008 set a target for the UK to reduce GHG emissions to 80% of their 1990 level by 2050. In June 2019, this was changed to a net-zero emissions target. The diagram below illustrates how the new target affects how quickly GHG emissions have to be reduced.



Note: MtCO₂e is a standardised measure of the emissions from different greenhouse gases based upon their global warming potential.

Source: BEIS (2019)

Figure 2: Sources of greenhouse gas emissions, UK, 1990–2017, MtCO₂e

	1990	2000	2010	2017
Transport	128.1	133.3	124.5	125.9
Energy supply	277.9	221.6	207.4	112.6
Business	114.0	115.4	94.1	80.1
Residential	80.1	88.7	87.5	66.9
Agriculture	54.0	50.3	44.6	45.6
Waste management	66.6	62.9	29.7	20.3
Industrial processes	59.9	27.1	12.6	10.8
Public sector	13.5	12.1	9.5	7.8
LULUCF	0.3	-3.9	-9.1	-9.9
Total	794.4	707.5	600.9	460.2

Source: ONS 2020, accessed January 2020

Note: LULUCF is land use, land use change and forestry.
The negative values show that the LULUCF sector absorbed GHG emissions in 2000, 2010 and 2017.
The figures may not sum to the totals due to rounding.

Figure 3: Sources of fuel used to produce electricity in the UK, 1990–2017, GWh

	1990	2000	2010	2017
Coal	119 950	107 594	75 878	22 530
Oil	6 524	4 805	2 037	1 615
Gas	148 077	175 653	99 875	136 746
Nuclear	85 063	62 140	70 345	70 336
Renewables	10 360	26 181	83 365	98 792
Other	4 401	2 545	4 636	5 281
Total	374 375	378 918	336 136	335 300

Source: ONS, accessed January 2020

Note: GWh is a unit of electricity used to measure the output of large power stations.
The main GHG emissions when producing electricity come from fossil fuels such as coal, oil and gas.

Turn over ►

Extract D: Solving the climate change crisis

In the long run, climate change will affect us all. So why don't firms and consumers act now to limit GHG emissions? One reason is that prices don't reflect the real costs and benefits. For example, when fuels which emit greenhouse gases are too cheap, they are overconsumed. 1

The earth's atmosphere is a common resource and so it is difficult to assign and enforce property rights. Economic incentives do not work effectively and markets fail to deal with global warming. 5

People are biased towards preserving their present benefits and undervalue future costs and benefits. Some producers in the fossil fuel industry are rich and powerful and are able to influence governments. The young, who will be most affected by climate change, are less powerful. 10

Carbon taxes could be used to discourage GHG emissions but it is difficult to decide how high the tax should be. Pollution permits could be introduced, but how much pollution should be allowed? Regulations that restrict GHG emissions increase firms' costs and have to be monitored. Subsidies to encourage the development of technologies that reduce carbon-emissions increase government spending. The European Commission plans to introduce a carbon border tax to protect energy-intensive industries against cheaper imports from countries with less strict climate policies, but this could breach World Trade Organisation (WTO) rules and invite retaliation. 15

Source: News reports, January 2020

Extract E: Reducing greenhouse gas emissions has benefits as well as costs

Some policies that reduce GHG emissions increase costs and make it difficult for firms to compete internationally. Energy-intensive industries, such as steel, chemical, cement and paper manufacture, would be particularly hard hit. Production could move elsewhere and these products would be imported from countries that are less concerned about GHG emissions. If UK policy is too restrictive, jobs will be lost and communities reliant on industries producing carbon-based products will suffer. If firms move abroad and investment in the UK economy falls, economic growth and living standards will be affected. Climate change is a global problem that cannot be solved by one country acting alone. 1

Nevertheless, failure to devote sufficient resources to tackling climate change now, may lead to higher costs in the future. Warmer temperatures, extreme weather, higher sea levels and flooding will damage property and vital infrastructure. More money will have to be spent on flood defences. Climate change will affect human health and reduce productivity. Some sectors of the economy will suffer, including agriculture and fishing. 5

Climate change provides opportunities for business to invest in clean, non-polluting sources of energy and energy-efficient buildings. Firms that win the race to supply electric vehicles and the vehicle-charging infrastructure will make substantial profits. Biotech companies will profit from developing crops resistant to the impact of climate change. The UK's success in producing wind-powered electricity from turbines provides export opportunities for UK businesses. The UK needs to compete in the growing markets for zero-carbon goods and services. 10

The move towards a zero-carbon economy will involve a change in the pattern of production but the economy cannot adjust instantaneously. The short-term costs to the macroeconomy could be substantial. 15

Source: News reports, January 2020

END OF EXTRACTS

There are no sources printed on this page

There are no sources printed on this page

Copyright information

For confidentiality purposes, all acknowledgements of third-party copyright material are published in a separate booklet. This booklet is available for free download from www.aqa.org.uk after the live examination series.

Copyright © 2021 AQA and its licensors. All rights reserved.

