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EDEXCEL INTERNATIONAL A LEVEL ECONOMICS: QUESTIONS BY TOPIC

Aggregate supply (AS) (2.3.3)

International A Level Economics · Unit 2: Macroeconomic performance and policy

23 questions · 130 marks · Mark schemes included
Past papers June 2019 - June 2025 · 3 specification sub-topics

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HOW TO USE THIS BOOKLET

Questions are grouped by specification sub-topic and run from the lowest to the highest mark tariff, then oldest paper first.

Click any row below to jump straight to that sub-topic or question.

On every question page, click ANSWER in the top-right corner to jump to its mark scheme; < QUESTION brings you back.

Whenever a question refers to an extract, figure or table, those exact pages are printed immediately before it ("extracts & data").

A gold bar in the left margin marks exactly where the question sits on the original page.

Diagrams, graphs, tables and data are printed exactly as they appear in the original papers.

QUESTION	SOURCE	MARKS	PAGE
2.3.3.1 THE CHARACTERISTICS OF AS		1 Qs · 1 marks	2
1. Q1	IAL Unit 2 October 2023	1	3
2.3.3.2 SHORT-RUN AS (SRAS)		11 Qs · 82 marks	4
2. Q6	IAL Unit 2 June 2022	1	5
3. Q4	IAL Unit 2 October 2024	1	6
4. Q9	IAL Unit 2 June 2019	4	7
5. Q10	IAL Unit 2 October 2020	4	8
6. Q8	IAL Unit 2 January 2022	4	9
7. Q8	IAL Unit 2 January 2025	4	10
8. Q12(d)	IAL Unit 2 October 2022	8	11
9. Q12(d)	IAL Unit 2 June 2023	8	16
10. Q12(c)	IAL Unit 2 January 2024	8	21
11. Q14	IAL Unit 2 January 2021	20	26
12. Q13	IAL Unit 2 January 2023	20	27
2.3.3.3 LONG-RUN AS (LRAS)		11 Qs · 47 marks	28
13. Q1	IAL Unit 2 January 2021	1	29
14. Q5	IAL Unit 2 January 2021	1	30
15. Q3	IAL Unit 2 (unused) January 2022	1	31
16. Q3	IAL Unit 2 June 2023	1	32
17. Q1	IAL Unit 2 January 2025	1	33
18. Q7	IAL Unit 2 January 2020	4	34
19. Q8	IAL Unit 2 January 2021	4	35
20. Q8	IAL Unit 2 June 2022	4	36
21. Q8	IAL Unit 2 June 2025	4	37
22. Q12(b)	IAL Unit 2 October 2022	6	38
23. Q14	IAL Unit 2 January 2025	20	43



QUESTIONS

23 questions · 130 marks · 3 sub-topics

SUB-TOPIC 2.3.3.1

THE CHARACTERISTICS OF AS

Sub-topic 2.3.3.1 · 1 question · 1 marks · lowest tariff first



SECTION A

Answer ALL questions in this section.

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 ☐.

1 Which **one** of the following will result in a movement along the AS curve?

- ☐ A An increase in the cost of raw materials
- ☐ B A decrease in the cost of energy
- ☐ C An increase in the price level
- ☐ D A decrease in the rate of indirect tax

(Total for Question 1 = 1 mark)

2 Japan's productivity is significantly lower than the productivity of France and Italy. The Government of Japan aims to increase the country's productivity.

Which **one** of the following is a free market supply-side policy?

- ☐ A Investment in education and training
- ☐ B Privatisation of state-owned industries
- ☐ C Investment in infrastructure projects
- ☐ D Providing finance for business start-ups

(Total for Question 2 = 1 mark)

3 The value of Burundi's multiplier is estimated to be approximately 0.1.

Ceteris paribus, which **one** of the following would cause an increase in the value of a country's multiplier?

- ☐ A An increase in the marginal propensity to save
- ☐ B An increase in the marginal propensity to import
- ☐ C A decrease in the marginal propensity to tax
- ☐ D A decrease in the marginal propensity to consume

(Total for Question 3 = 1 mark)



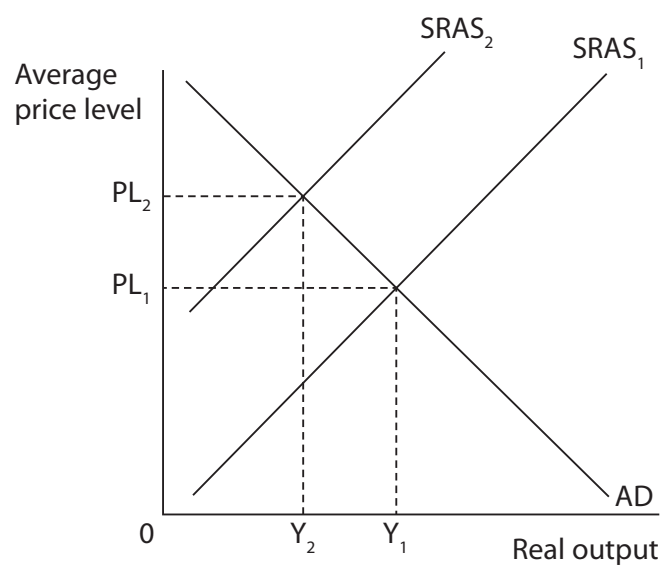
SUB-TOPIC 2.3.3.2

SHORT-RUN AS (SRAS)

Sub-topic 2.3.3.2 · 11 questions · 82 marks · lowest tariff first



- 6 The diagram shows the short-run aggregate supply curve and the aggregate demand curve for China's economy.



Which **one** of the following was the most likely cause of the change from SRAS₁ to SRAS₂?

- ☐ A An increase in energy prices
- ☐ B A decrease in indirect tax rates
- ☐ C An increase in investment in education
- ☐ D A decrease in bank lending to consumers

(Total for Question 6 = 1 mark)

TOTAL FOR SECTION A = 6 MARKS

4 Which **one** of the following would cause a leftward shift in a country's short-run aggregate supply (SRAS) curve?

- ☐ A A decrease in bank lending to consumers
- ☐ B A decrease in the rate of indirect tax
- ☐ C An increase in the price of natural gas
- ☐ D An increase in investment in healthcare

(Total for Question 4 = 1 mark)

5 In 2022 the Czech Republic's economy was operating below its productive potential as a result of a fall in its manufacturing production.

Which **one** of the following is most likely to be associated with a negative output gap?

- ☐ A An increase in house prices
- ☐ B An increase in the rate of inflation
- ☐ C An increase in business confidence
- ☐ D An increase in unemployment

(Total for Question 5 = 1 mark)

- 9** Between January 2016 and January 2018 the price of oil rose from \$30 per barrel to \$65 per barrel. France is a net importer of oil.

Draw a short-run AS and AD diagram to show the effect of the increase in the price of oil on the price level and real output for France.

(Total for Question 9 = 4 marks)



Draw an AD and SRAS diagram to show the possible impact of the fall in oil prices on the price level **and** real output on the German economy.

(Total for Question 10 = 4 marks)



- 8** Between January 2014 and September 2020 the price of natural gas fell from \$5.60 per cubic foot to \$1.66 per cubic foot. Natural gas is an important source of energy for Japanese producers.

Draw a SRAS and AD diagram to show the effect of the decrease in the price of natural gas on the price level and real output for Japan.

(Total for Question 8 = 4 marks)



8 Between January 2020 and December 2022 the global price of coal per tonne increased from \$64.25 to \$172.30. Japan is a net importer of coal.

Draw a SRAS and AD diagram to show the effect of this increase in the price of coal on the price level **and** real output for Japan.

(Total for Question 8 = 4 marks)



SECTION C

Study Figure 1, Figure 2 and Extract A in the Source Booklet before answering Question 12.

Write your answers in the space provided on the following pages.

- 12** (a) Define the term 'net migration' (Extract A, line 13). (2)
- (b) With reference to Figure 2 and Extract A, analyse **two** possible impacts of net migration on the UK economy. (6)
- (c) With reference to Figure 1, explain the term 'productivity'. (4)
- (d) Examine **two** likely macroeconomic effects of 'significant wage increases' (Extract A, line 21) on the UK economy. (8)
- (e) Discuss supply-side policies that the UK Government could use to increase productivity. (14)



Sources for use with Section C

The UK economy

Figure 1 Index of productivity for selected countries (2010=100), 2010 to 2020

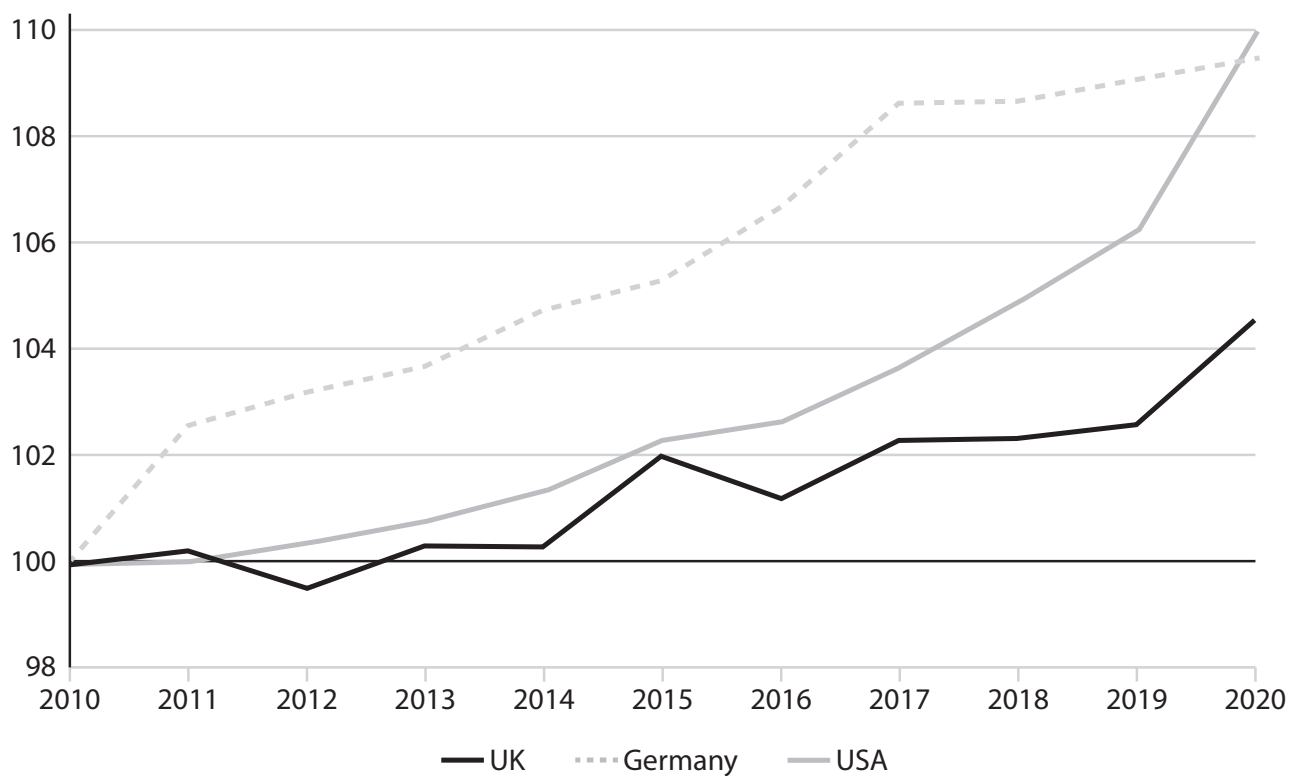


Figure 2 UK net migration, 2010 to 2019

Year	Net migration (thousands)
2010	256
2011	249
2012	161
2013	208
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2015	329
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2019	271



Extract A Low productivity

In 2021 the UK Government argued that the disruption in UK supply chains was mainly as a result of low wages, inadequate skills, and low productivity. The Government stated that reductions in welfare benefits and in the number of low-skilled immigrants were needed to increase the country's productivity. The UK Government suggested that a decrease in low-skilled immigration would force businesses to invest in training and in capital equipment. 5

The goal of successive UK Governments has been to increase the UK's productivity to improve living standards. However, between 1997 and 2008, the average annual productivity growth was only 1.9%. Between 2009 and 2019 it fell to 0.7%. By 2021 productivity was nearly 20% below the level it would have reached if it had continued at 1.9%. 10

Some economists believe that high rates of net migration were not the only reason for the UK's poor productivity performance. They suggested that three other factors were also significant: 15

- the 2008 global financial crisis
- the UK's decision to leave the European Union
- the 2020–2022 global health crisis.

These factors made many UK businesses particularly cautious about investing in innovation and research and development. 20

In 2021 UK employers reported they were facing significant wage increases, especially in jobs where severe shortages exist. There was a concern that these wage increases would harm the UK economy unless there was a growth in productivity. However, some economists argue that rising wages could incentivise businesses to invest in labour-saving machinery and staff training. 25

The shock of the global health crisis may provide a much-needed boost to UK productivity for reasons not associated with labour shortages. Many businesses have an opportunity to innovate and improve their operations before restarting again.

The UK Government intends to solve the country's low productivity by increasing investment in skills and in infrastructure. It is essential that it works in partnership with businesses to achieve an increase in productivity and in the rate of economic growth. 30

(8)





SECTION C

Study Figure 1 and Extract A in the Source Booklet before answering Question 12.

Write your answers in the space provided on the following pages.

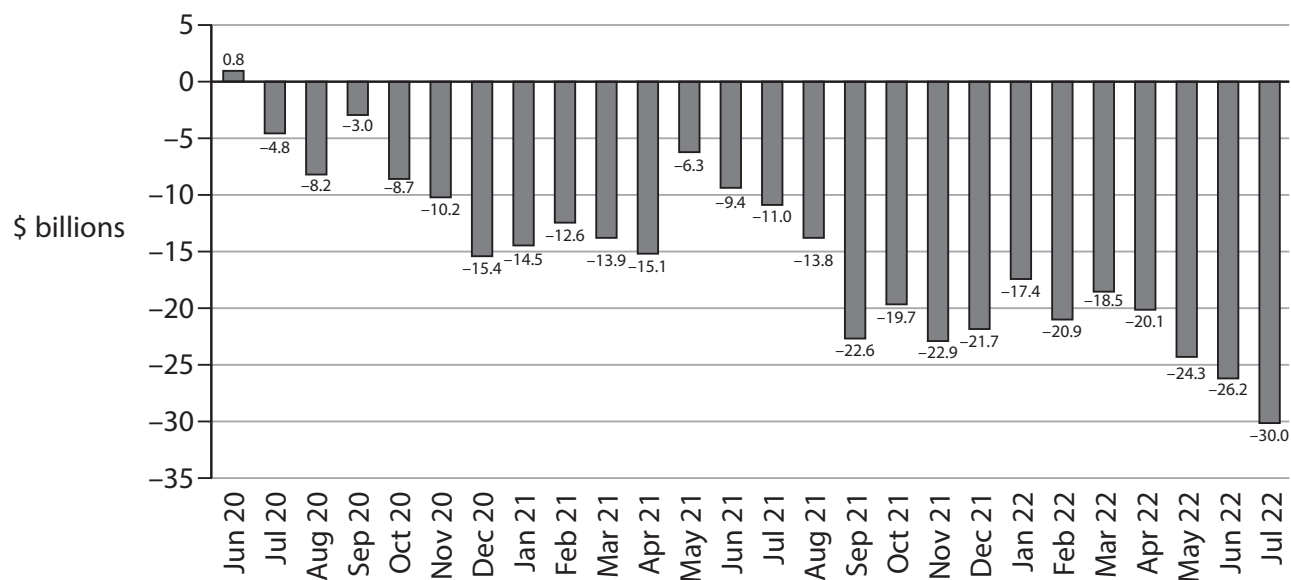
- 12** (a) Define the term 'GDP growth rate' (Extract A, line 23). (2)
- (b) With reference to Figure 1, explain the difference between a balance of trade deficit and a balance of trade surplus. (4)
- (c) Analyse how an increase in the rate of inflation could have a 'negative impact on India's balance of trade' (Extract A, line 9). (6)
- (d) Examine the likely impact on India's real output of its 'increased expenditure on imported oil' (Extract A, line 7). (8)
- (e) With reference to the information provided and your own knowledge, discuss the likely effects of the increase in the base rate of interest on the Indian economy. (14)



Sources for use with Section C

The Indian economy

Figure 1 Balance of trade, June 2020 to July 2022



Extract A Balance of trade, inflation and economic growth

In 2022 the Indian economy was experiencing several challenges following the global health crisis. In particular, there was a rising rate of inflation caused by its dependence on imported oil. Oil accounts for 30% of India's imports by value. This is more than double the average of 14.7% for other major Asian economies, such as China, Japan and South Korea. In July 2022 India reported a record balance of trade deficit of \$30 billion, largely caused by the increased expenditure on imported oil. This deficit was one of the largest of all the Asian economies. Economists expect the rate of inflation to increase which will have a further negative impact on India's balance of trade. 5

The rate of inflation was 7.01% in June 2022 compared with June 2021. This was the second highest rate of inflation of the larger Asian economies. This higher rate of inflation reduced the purchasing power of consumers in India. As a result, many consumers were struggling to afford basic necessities. According to economists there were increasing signs that consumer expenditure would increase at a slower rate in the second half of 2022 than in the first half of 2022. This was likely to cause a fall in the rate of economic growth. 10 15

During 2022, India's currency, the rupee, fell in value against the US dollar. In order to prevent the rupee from falling further, and to control the rising rate of inflation, India's central bank raised the country's base rate of interest to 4.9% in June 2022. This represented an increase of 0.5 percentage points from the previous month. 20

Unlike several other Southeast Asian countries, exports of services contribute more to India's economic growth rate than exports of goods.

The Asian Development Bank (ADB) decreased its projected GDP growth rate for India to 6.7% for 2022. This was as a result of the high rate of inflation in India and the deflationary monetary policy adopted by India's central bank. The ADB predicted a small increase in consumer expenditure in the second half of 2022. However, it believed that this increase in consumption will not be sufficient to maintain India's rate of economic growth. 25

(8)





SECTION C

Study Figure 1, Figure 2, Extract A and Extract B in the Source Booklet before answering Question 12.

Write your answers in the space provided on the following pages.

- 12** (a) Define the term 'GDP per capita' (Figure 1). (2)
- (b) With reference to Figure 1, explain the likely impact of higher real incomes on subjective happiness. (4)
- (c) Examine the likely impact on the UK's real output of 'the rising cost of energy' (Extract A, line 4). (8)
- (d) With reference to Figure 2 and Extract A, analyse **two** factors that influence business investment. (6)
- (e) With reference to the information provided, discuss supply-side policies that the UK Government has introduced to increase the country's productive potential. (14)

Sources for use with Section C

The UK economy

Figure 1 Real GDP per capita, £ thousands, 2010-2022

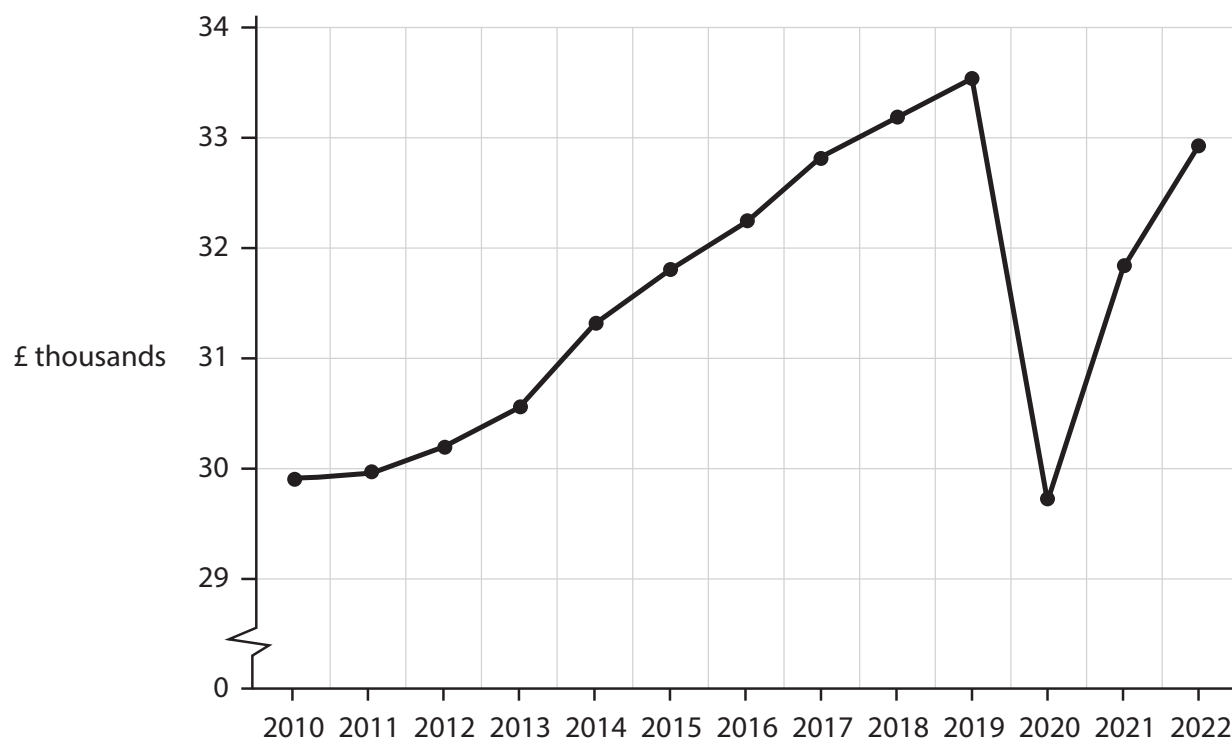
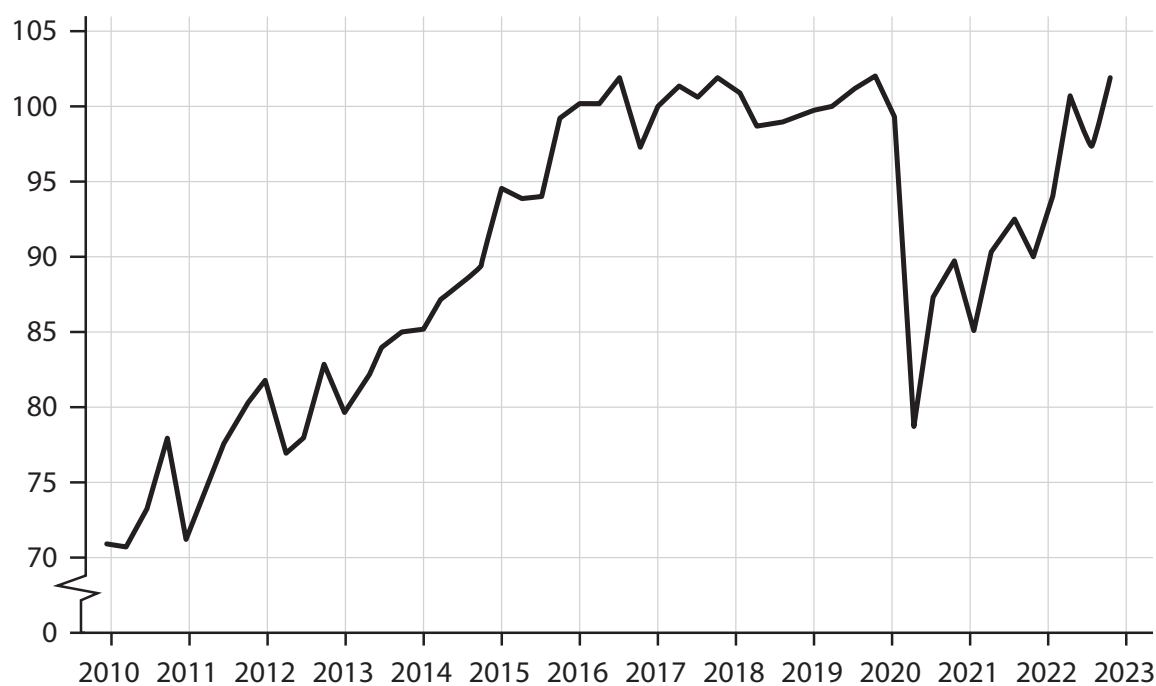


Figure 2 Index of business investment between 2010 and 2022, (Q1 2016=100)



Extract A Low rate of economic growth

The UK's real GDP at the end of 2022 was smaller than it was at the start of 2020. There are two main reasons why the UK's rate of economic growth has been low since the start of 2020. Firstly, the global health crisis of 2020 and secondly, the rising cost of energy in 2022. For example, the price of natural gas rose by more than 100%. The UK is a net importer of natural gas.

5

However, some economists believe these two reasons are insufficient to explain why the UK economy has been unable to increase its level of real GDP. They identified additional reasons:

- labour market participation has declined significantly since the start of the global health crisis of 2020. As a result, between 2020 and 2022, the UK labour force decreased by 520 000 10
- low levels of productivity in the UK labour market. Workers in the UK have lower skills than workers in other advanced economies. There was also a shortage of skilled and unskilled labour 15
- the UK's decision to leave the European Union in 2016 resulted in lower levels of business investment
- high costs of bureaucracy and strict planning regulations associated with the construction of infrastructure projects, such as building power plants and energy facilities. 20

In the last quarter of 2022 various international institutions forecast that the UK would continue to be one of the worst-performing advanced economies in 2023.

Extract B Supply-side policies

In March 2023 the UK Government introduced a range of supply-side policies to increase the productive potential of the UK economy. These included:

- increased financial support for childcare to reduce economic inactivity and increase the rate of employment 5
- 100% tax relief on business investment for three years
- subsidies to support the development of new technologies including artificial intelligence
- relaxing immigration rules to attract more workers in five sectors of the economy where severe labour shortages exist e.g. construction and healthcare. 10

These policies would cost the UK Government nearly £20 billion.

However, the Government did not announce any plans to tackle the UK's strict planning laws. In addition, there were no measures to improve the skills of the workforce. Increasing labour productivity is just as important as increasing the number of workers.

(8)





SECTION D

Answer ONE question from this section.

Write your answer in the space provided.

EITHER

- 13** From 2008 to 2018 Thailand's GDP per capita increased by 100%. Over the same period national happiness in Thailand also rose. However, from 2008 to 2018 India's GDP per capita increased by 80% but national happiness fell.

Evaluate the view that achieving a government's macroeconomic objectives is likely to result in an increase in national happiness.

(Total for Question 13 = 20 marks)

OR

- 14** Between January 2020 and May 2020 the global oil price decreased from \$63 a barrel to \$31 a barrel.

Evaluate the view that falling global oil prices will always benefit a country's macroeconomy.

(Total for Question 14 = 20 marks)

SECTION D

Answer ONE question from this section.

Write your answer in the space provided.

EITHER

- 13** Between May 2020 and March 2022 the global oil price increased from \$39 a barrel to \$106 a barrel.

Evaluate the view that very high global oil prices will always harm a country's macroeconomy.

(Total for Question 13 = 20 marks)

OR

- 14** Between June 2021 and November 2021 the rate of employment in Australia decreased from 63% to 61.5%.

Evaluate government policies that could be used to increase the rate of employment. Refer to a country of your choice in your answer.

(Total for Question 14 = 20 marks)



SUB-TOPIC 2.3.3.3

LONG-RUN AS (LRAS)

Sub-topic 2.3.3.3 · 11 questions · 47 marks · lowest tariff first

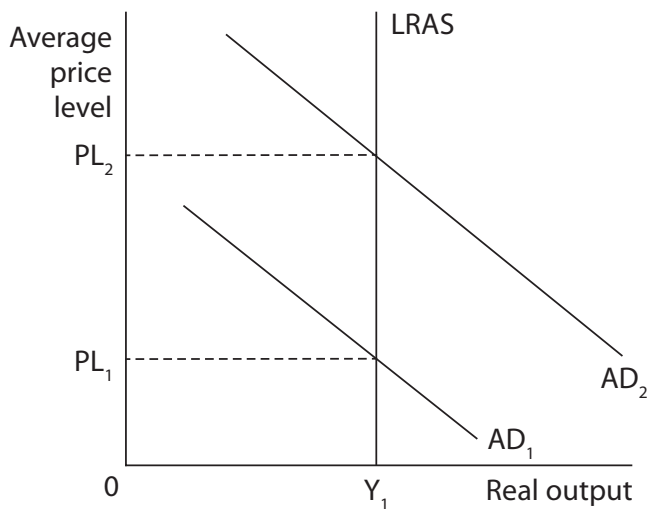
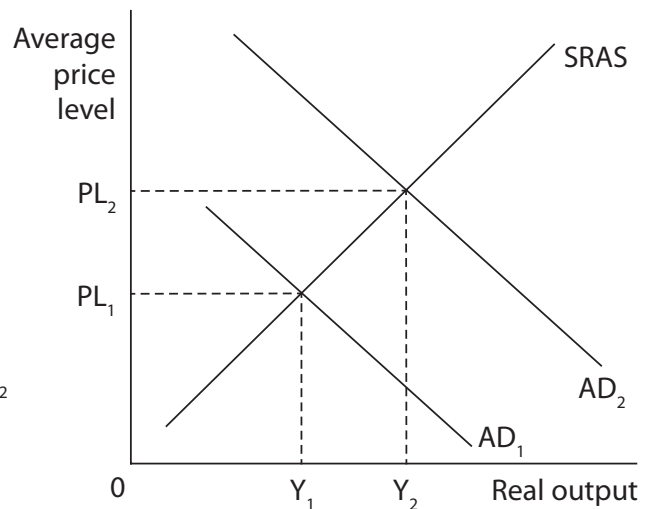
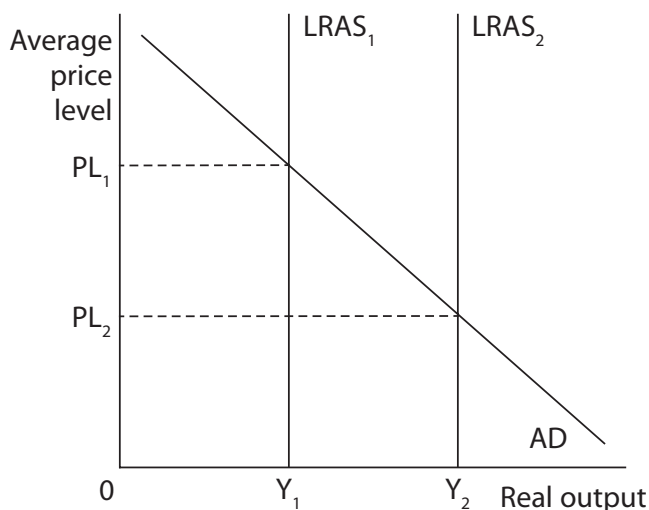
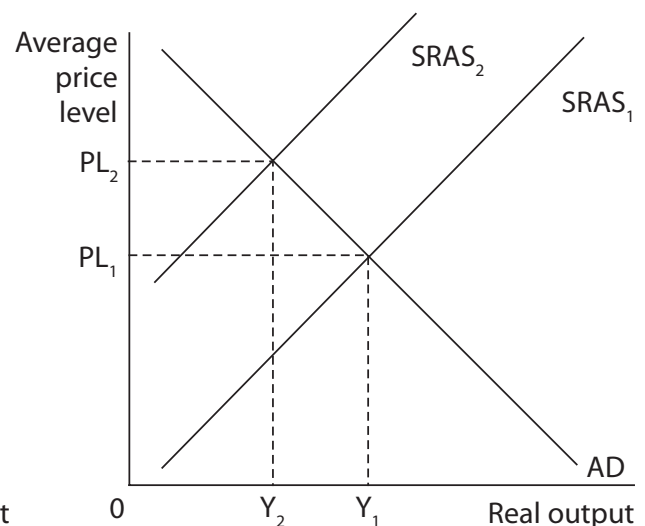


SECTION A

Answer ALL questions in this section.

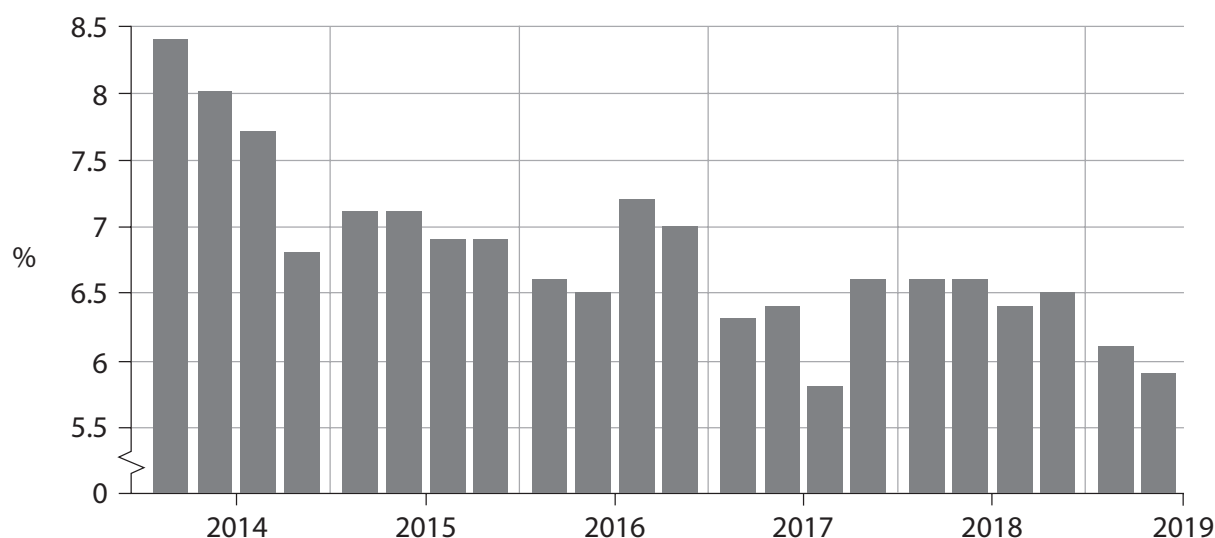
Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

- 1 Which **one** of the following aggregate demand and aggregate supply diagrams below illustrates an economy experiencing **potential** economic growth?

☒ A☒ B☒ C☒ D

(Total for Question 1 = 1 mark)

4 The chart shows Portugal's household savings ratio by quarter, Q1 2014–Q2 2019.



According to the long-term trend in the chart, *ceteris paribus*, which **one** of the following is most likely to have risen in Portugal?

- ☐ A Consumption
- ☐ B Exports
- ☐ C Unemployment
- ☐ D Withdrawals

(Total for Question 4 = 1 mark)

5 Which **one** of the following statements about the Keynesian long-run aggregate supply (LRAS) curve is correct?

- ☐ A The curve is perfectly inelastic at the full employment level of real output
- ☐ B The curve is relatively elastic at the full employment level of real output
- ☐ C The curve is relatively inelastic at high levels of spare capacity
- ☐ D The curve is perfectly inelastic at high levels of spare capacity

(Total for Question 5 = 1 mark)

- 2 In the USA, in 2020, research showed that 33.8% of university graduates were working in jobs that did not require a university degree.

Which **one** of the following best describes this situation?

- ☐ A Real wage inflexibility
- ☐ B Economic inactivity
- ☐ C Unemployment
- ☐ D Underemployment

(Total for Question 2 = 1 mark)

- 3 In Quarter 3 of 2020 labour productivity improved by 9.8% in Ireland compared to the same quarter in 2019.

Ceteris paribus, what was the most likely impact of this change in labour productivity?

- ☐ A The aggregate demand curve shifted to the left
- ☐ B The aggregate demand curve shifted to the right
- ☐ C The long-run aggregate supply curve shifted to the right
- ☐ D The short-run aggregate supply curve shifted to the left

(Total for Question 3 = 1 mark)

- 4 In 2019 the German Government's tax revenue exceeded its expenditure by €45.35 billion.

Ceteris paribus, which **one** of the following can be deduced from this information?

- ☐ A Germany had a net withdrawal from the circular flow of income
- ☐ B Germany had a net injection into the circular flow of income
- ☐ C Germany had a deficit on the current account of the balance of payments
- ☐ D Germany had a surplus on the current account of the balance of payments

(Total for Question 4 = 1 mark)

SECTION A**Answer ALL questions in this section.**

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 ☒.

1 Which **one** of the following is a withdrawal from the circular flow of income?

- ☐ **A** Investment
- ☐ **B** Consumption
- ☐ **C** Savings
- ☐ **D** Exports

(Total for Question 1 = 1 mark)

2 Spain's unemployment rate fell from 13.6% in quarter 1 2022 to 12.5% in quarter 2 2022.
Its annual rate of inflation increased from 6.1% in January 2022 to 10.2% in June 2022.

Which **one** of the following best illustrates the possible conflict between the macroeconomic objectives of a low rate of inflation and a low rate of unemployment?

- ☐ **A** The short-run Phillips curve
- ☐ **B** The aggregate demand curve
- ☐ **C** The short-run AS curve
- ☐ **D** The Keynesian LRAS curve

(Total for Question 2 = 1 mark)

3 Which **one** of the following statements about the classical long-run aggregate supply (LRAS) curve is correct?

- ☐ **A** It is relatively elastic at high levels of spare capacity
- ☐ **B** It is perfectly inelastic at the full employment level of real output
- ☐ **C** It is perfectly inelastic at high levels of spare capacity
- ☐ **D** It is relatively elastic at the full employment level of real output

(Total for Question 3 = 1 mark)



SECTION A

Answer ALL questions in this section.

Questions must be answered with a cross ☐. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☐.

- 1 Which **one** of the following statements about the classical long-run aggregate supply (LRAS) curve is correct?

- ☐ A It is perfectly inelastic when there is a high level of spare capacity
- ☐ B It is relatively elastic at the full employment level of real output
- ☐ C It is relatively inelastic at high levels of spare capacity
- ☐ D It is perfectly inelastic at the full employment level of real output

(Total for Question 1 = 1 mark)

- 2 In 2022 the Government of Brazil announced that it was introducing measures to cut the costs of bureaucracy for firms.

This policy is an example of which **one** of the following?

- ☐ A Free market supply-side policy
- ☐ B Interventionist supply-side policy
- ☐ C Reflationary fiscal policy
- ☐ D Deflationary fiscal policy

(Total for Question 2 = 1 mark)

- 3 Between January 2022 and January 2023 Turkey's unemployment rate fell from 11.2% to 9.8%.

Which **one** of the following is the percentage change in the unemployment rate for Turkey between January 2022 and January 2023?

- ☐ A -1.4
- ☐ B -12.5
- ☐ C -14.3
- ☐ D -21.0

(Total for Question 3 = 1 mark)



SECTION B

Answer ALL questions in this section in the space provided.

- 7** Net migration in Lithuania fell from 1.4% of the population in 2003 to -6.1% in 2017.

Explain **one** possible effect of this change in net migration on Lithuania's long-run aggregate supply.

(Total for Question 7 = 4 marks)



Draw a LRAS and AD diagram to show the possible impact of this change in productivity on the average price level and real output level in Brazil.

[illegible]

(Total for Question 8 = 4 marks)



8 For the year ending June 2020, there were 153 900 immigrants arriving in New Zealand and 74 200 emigrants leaving New Zealand.

Draw a LRAS and AD diagram to show the effect of this net migration on the price level **and** real output for New Zealand.

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting or typing. There are no margins, text, or other markings on the page.

(Total for Question 8 = 4 marks)



8 In 2023 Ghana experienced a negative output gap.

Draw a Keynesian AS/AD diagram to illustrate a negative output gap.

(Total for Question 8 = 4 marks)



SECTION C

Study Figure 1, Figure 2 and Extract A in the Source Booklet before answering Question 12.

Write your answers in the space provided on the following pages.

- 12** (a) Define the term 'net migration' (Extract A, line 13). (2)
- (b) With reference to Figure 2 and Extract A, analyse **two** possible impacts of net migration on the UK economy. (6)
- (c) With reference to Figure 1, explain the term 'productivity'. (4)
- (d) Examine **two** likely macroeconomic effects of 'significant wage increases' (Extract A, line 21) on the UK economy. (8)
- (e) Discuss supply-side policies that the UK Government could use to increase productivity. (14)



Sources for use with Section C

The UK economy

Figure 1 Index of productivity for selected countries (2010=100), 2010 to 2020

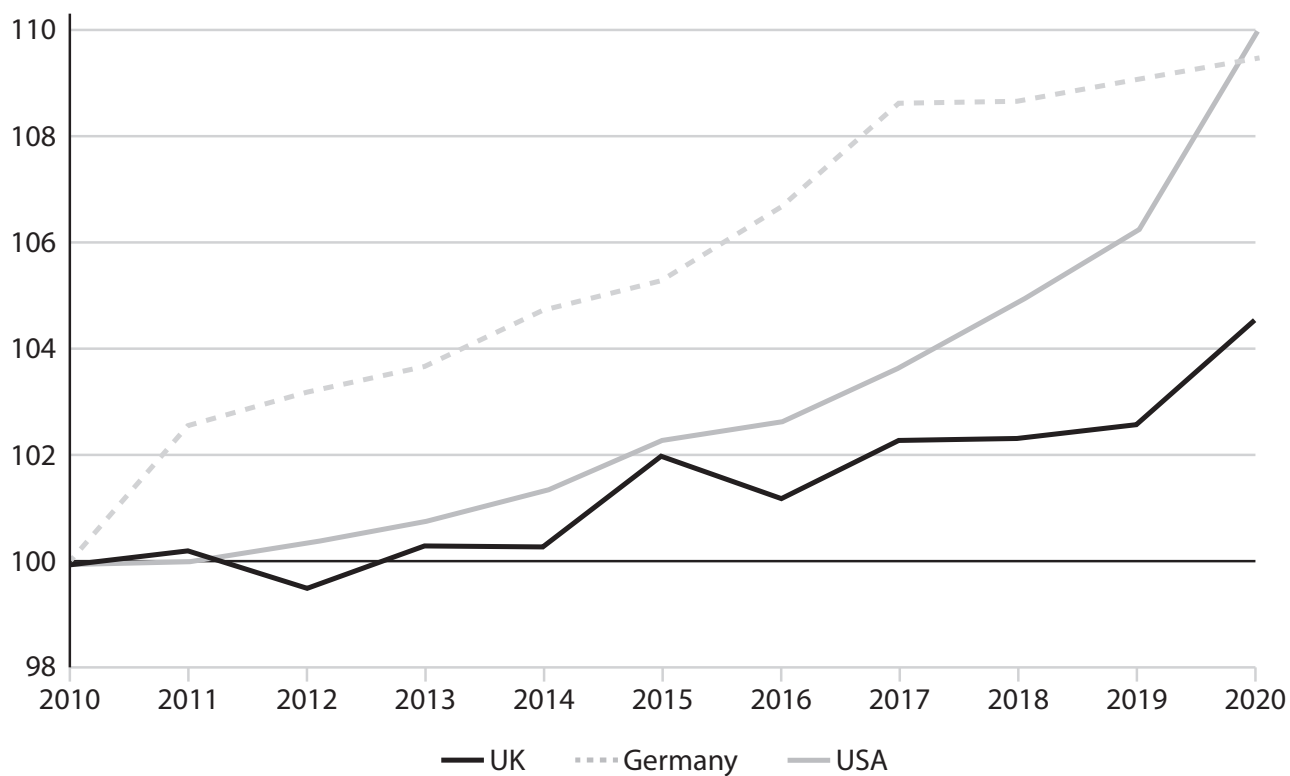


Figure 2 UK net migration, 2010 to 2019

Year	Net migration (thousands)
2010	256
2011	249
2012	161
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2018	232
2019	271



Extract A Low productivity

In 2021 the UK Government argued that the disruption in UK supply chains was mainly as a result of low wages, inadequate skills, and low productivity. The Government stated that reductions in welfare benefits and in the number of low-skilled immigrants were needed to increase the country's productivity. The UK Government suggested that a decrease in low-skilled immigration would force businesses to invest in training and in capital equipment. 5

The goal of successive UK Governments has been to increase the UK's productivity to improve living standards. However, between 1997 and 2008, the average annual productivity growth was only 1.9%. Between 2009 and 2019 it fell to 0.7%. By 2021 productivity was nearly 20% below the level it would have reached if it had continued at 1.9%. 10

Some economists believe that high rates of net migration were not the only reason for the UK's poor productivity performance. They suggested that three other factors were also significant: 15

- the 2008 global financial crisis
- the UK's decision to leave the European Union
- the 2020–2022 global health crisis.

These factors made many UK businesses particularly cautious about investing in innovation and research and development. 20

In 2021 UK employers reported they were facing significant wage increases, especially in jobs where severe shortages exist. There was a concern that these wage increases would harm the UK economy unless there was a growth in productivity. However, some economists argue that rising wages could incentivise businesses to invest in labour-saving machinery and staff training. 25

The shock of the global health crisis may provide a much-needed boost to UK productivity for reasons not associated with labour shortages. Many businesses have an opportunity to innovate and improve their operations before restarting again.

The UK Government intends to solve the country's low productivity by increasing investment in skills and in infrastructure. It is essential that it works in partnership with businesses to achieve an increase in productivity and in the rate of economic growth. 30

(6)





SECTION D

Answer ONE question from this section.

Write your answer in the space provided.

EITHER

- 13** In 2022 the Government of China decided to invest 1.48 trillion yuan in many new transportation, energy and telecommunication infrastructure projects.

Evaluate the likely benefits of an increase in government expenditure on infrastructure.

Refer to a country of your choice in your answer.

(Total for Question 13 = 20 marks)

OR

- 14** Between 2012 and 2022 the productivity rate in Turkey increased by 39.2%.

Evaluate the likely benefits of an increase in the productivity rate.

Refer to a country of your choice in your answer.

(Total for Question 14 = 20 marks)



MARK SCHEMES

official mark schemes, in the same order as the questions



Section A

Question	Quantitative skills assessed	Answer	Mark
1	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is C <i>A is not correct as this will shift the AS curve</i> <i>B is not correct as this will shift the AS curve</i> <i>D is not correct as this will shift the AS curve</i>	(1)
2	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is B <i>A is not correct as this is an interventionist supply-side policy</i> <i>C is not correct as this is an interventionist supply-side policy</i> <i>D is not correct as this is an interventionist supply-side policy</i>	(1)
3	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is C <i>A is not correct because this will decrease the value of the multiplier</i> <i>B is not correct because this will decrease the value of the multiplier</i> <i>D is not correct because this will decrease the value of the multiplier</i>	(1)
4	QS4: Construct and interpret a range of standard graphical forms QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is B <i>A is not correct because between A to B the economy is experiencing a downturn/ negative economic growth</i> <i>C is not correct because at point C there is no output gap</i> <i>D is not correct because between C and D the economy is growing, and with greater output, unemployment is likely to be falling</i>	(1)
5		The only correct answer is A <i>B is not correct as this is the role of the government</i> <i>C is not correct as this is the role of the government</i> <i>D is not correct as this is the role of the government</i>	(1)
6	QS5: Calculate and interpret index numbers QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is D <i>A is not correct as this is the base year</i> <i>B is not correct as this is the index number for 2020 using 2019 as the base year</i> <i>C is not correct as this is the index number for 2021 using 2020 as the base year</i>	(1)

		<i>D is not correct as this will worsen the Government's budget position</i>	
6	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is A <i>B is not correct as SRAS will shift outwards</i> <i>C is not correct as LRAS will shift outwards</i> <i>D is not correct as AD will shift inwards</i>	(1)



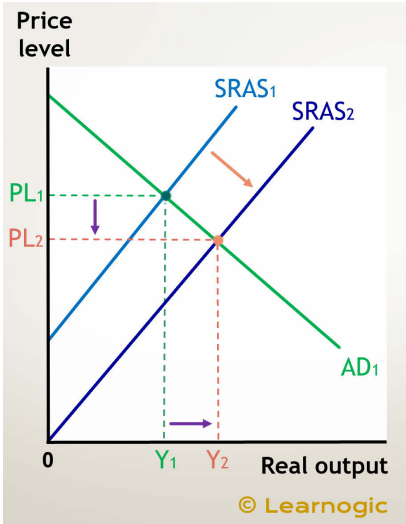
Section B

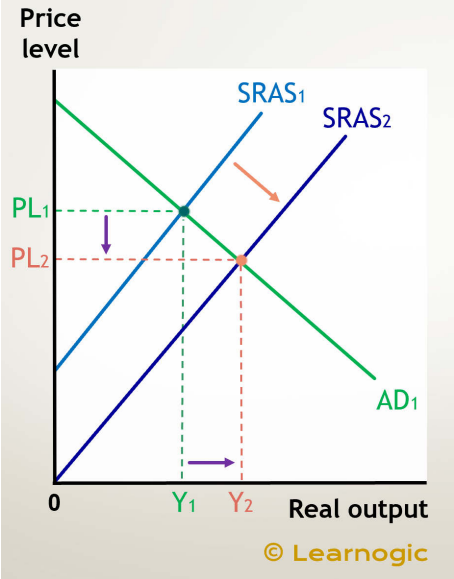
Question	With reference to the chart, explain one likely reason for the surplus in Malaysia's balance of trade in goods and services.	Mark
7	Knowledge 1, Analysis 2, Application 1 Quantitative skills assessed: QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms Knowledge and analysis 1 mark for definition of balance of trade surplus, e.g.: - When the value of exports is greater than value of imports - Exports are greater than imports / ($X > M$) NB Do not award marks for the definition of trade balance OR 1 mark for identification of a reason and up to 2 marks for linked analysis, e.g. • Decreasing real incomes (1K) demand for imports decreases (1AN) as consumers will have a low marginal propensity to import (1AN) • Relatively high productivity (1K) reduces cost per unit (1AN) makes exports relatively cheap, increasing the demand for Malaysian goods and services (1AN) • Depreciation of the exchange rate (1K) makes exports relatively cheaper (1AN) and imports relatively expensive (1AN) • Improvement in the quality of exports (1K) makes Malaysian goods and services more competitive (1AN) increases the demand for exports (1AN) Application 1 mark for appropriate use of the chart, e.g.: • In May 2021 there is a trade surplus of \$13.7 billion (1) • Trade surplus in every month, May 2020 - May 2021 (1) • Positive trade balance throughout the period shown (1) • The value of exports is greater than the value of imports by over \$10 billion every month (1)	(4)

Section A

Question	Quantitative skills assessed	Answer	Mark
1	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is B <i>A is not correct because net investment is gross investment minus capital depreciation</i> <i>C is not correct because net investment is gross investment minus capital depreciation</i> <i>D is not correct because net investment is gross investment minus capital depreciation</i>	(1)
2	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is C <i>A is not correct as this occurs when people move between jobs</i> <i>B is not correct as this occurs when wages are set above the equilibrium wage rate</i> <i>D is not correct as this occurs when there is a mismatch between the skills that workers have and the skills demanded by employers</i>	(1)
3	QS1: Calculate, use and understand ratios and fractions QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is A <i>B is not correct as this is the ratio of Qatar's GNI in 2020 to its GNI in 2022</i> <i>C is not correct as this is 1 : percentage change in GNI</i> <i>D is not correct as this is 1 : difference between the GNI values</i>	(1)
4	QS4: Construct and interpret a range of standard graphical forms QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is C <i>A is not correct as this will increase aggregate demand</i> <i>B is not correct as this will cause a rightward shift in the SRAS curve</i> <i>D is not correct as this will increase aggregate demand /shift the LRAS curve to the right</i>	(1)
5	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is D <i>A is not correct as house prices are likely to fall</i> <i>B is not correct as the rate of inflation is likely to fall</i> <i>C is not correct as business confidence is likely to fall</i>	(1)
6	QS5: Calculate and interpret index numbers QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is D <i>A is not correct as this will be a result of a fall in consumer confidence</i> <i>B is not correct as the price level will rise</i> <i>C is not correct as real output will rise</i>	(1)

Question	Draw a short-run AS and AD diagram to show the effect of the increase in the price of oil on the price level and real output for France.	Mark
9	Knowledge 1, Application 3 Quantitative skills assessed: QS4: Construct and interpret a range of standard graphical forms QS9: Interpret, apply and analyse information in written, graphical and tabular forms. Knowledge 1 mark for drawing original AD and SRAS curves with correctly labelled axis Application 1 mark for shift in SRAS. 1 mark for shift in AD. 1 mark for new equilibrium with lower real GDP/output • NB Price level may rise or fall depending on shift in AD and SRAS.	(4)

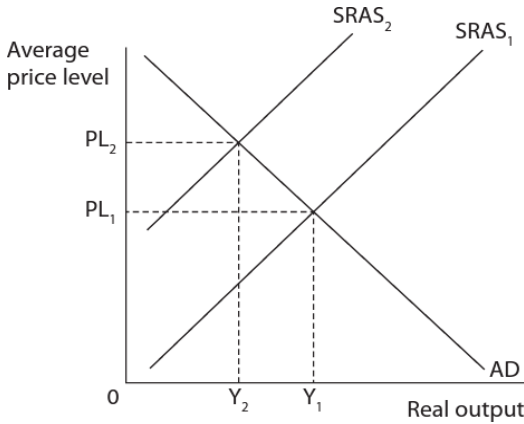
Question Number	Answer	Mark
10	Knowledge 1, Application 3 Quantitative skills assessed: QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms.  Knowledge Correctly drawn original AD/SRAS diagram with correctly labelled AD/SRAS curves (1) Application Up to 3 marks for the following information included on the diagram: • Drawing SRAS shifted to the right (1) • New equilibrium showing correct lower price level (1) (not rewarded if 'price' is used on axis) • New equilibrium showing correct higher real output/income/GDP/Y (1) (not rewarded if 'quantity' is used on axis) NB: also allow an AD/SRAS diagram showing and/or an increase in AD (as value of oil imports falls), as follows: • Drawing AD shifted to the right (1) • New equilibrium showing correct price level (1) (not rewarded if 'price' is used on axis) • New equilibrium showing correct higher real output/income/GDP/Y (1) (not rewarded if 'quantity' is used on axis)	(4)

Question	Draw a SRAS and AD diagram to show the effect of the decrease in the price of natural gas on the price level and real output for Japan.	Mark
8	Knowledge 1, Application 3 Quantitative skills assessed: QS4: Construct and interpret a range of standard graphical forms QS9: Interpret, apply and analyse information in written, graphical and tabular forms  Knowledge Correctly labelled original SRAS/AD curves (1) Application Up to 3 marks for the following information included on the diagram: • Drawing SRAS shifted to the right (1) • New equilibrium showing correct lower price level (1) (not rewarded if 'price' is used on axis) • New equilibrium showing correct higher real output/ income/GDP (1) (not rewarded if 'quantity' is used on axis) NB: also allow a SRAS/AD diagram showing both an increase in SRAS and an increase in AD as follows: • Drawing SRAS and AD shifted to the right (1) • New equilibrium showing correct price level (1) (not rewarded if 'price' is used on axis)	(4)

	New equilibrium showing correct higher real output/ income/GDP (1) (not rewarded if 'quantity' is used on axis) NB: if only AD curve is shifted then maximum of 2 marks	
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Question	Based on this information, calculate <i>the change</i> in Argentina's GDP per capita between 2018 and 2019. Show your workings.	Mark
9	Knowledge 1, Application 3 Quantitative Skill assessed QS1: Calculate, use and understand ratios and fractions QS9: Interpret, apply and analyse information in written, graphical and tabular forms Knowledge 1 mark for correct definition/formula/implicit understanding, e.g.: - GDP divided by population / - GDP per capita is a measure of a country's economic output that accounts for its number of people (1) Application Up to 3 marks for use of data in calculation from the following, e.g.: 2018 → \$517 627 million / 44.5 million = \$11 632.07 (1) 2019 → \$445 445 million / 44.9 million = \$9 920.82 (1) - Change is → \$9 920.82 - \$11 632.07 = -\$1 711.25 (1) NB: if correct answer (between -\$1 711 and -\$1 712) is given, award full marks regardless of working NB: award up to 3 marks if minus sign not included in the final answer	(4)



Question	Draw a SRAS and AD diagram to show the effect of this increase in the price of coal on the price level and real output for Japan.	Mark
8	Knowledge 1, Application 3 Quantitative skills assessed: QS4: Construct and interpret a range of standard graphical forms QS9: Interpret, apply and analyse information in written, graphical and tabular forms  Knowledge Correctly drawn SRAS and AD curves with correctly labelled axes (1) Application Up to 3 marks for the following information included on the diagram: • Drawing SRAS shifted to the left (1) • New equilibrium showing correct higher price level (1) (not rewarded if 'price' is used on axis) • New equilibrium showing correct lower real output/ income/GDP (1) (not rewarded if 'quantity' is used on axis) NB: also allow a SRAS/AD diagram showing both a decrease in SRAS and a decrease in AD as follows: • Drawing both SRAS and AD shifted to the left (1) • New equilibrium showing correct price level (1) (not rewarded if 'price' is used on axis) • New equilibrium showing correct lower real output/ income/GDP (1) (not rewarded if 'quantity' is used on axis) NB: also allow a SRAS/AD diagram showing a decrease in AD	(4)

Question	Examine two likely macroeconomic effects of 'significant wage increases' (Extract A, line 21) on the UK economy. Answer	Mark
12(d)	Knowledge 2, Application 2, Analysis 2, Evaluation 2 Quantitative Skill Assessed QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms Knowledge and analysis Up to 2 marks for identifying two likely effects of wage increases and 1 analysis mark for each linked development e.g.: • Decrease in real output (1K) as the SRAS is likely to shift to the left/inwards due to rising costs (1AN) • Increase in cost-push inflation (1K) as workers demand higher wages because their real income eroded by inflation/firms can pass higher costs to consumers in form of higher prices (1AN) • Increase in unemployment (1K) as there will be lower demand for labour/firms are likely to introduce more capital-intensive methods of production in their operations (1AN) • Deterioration in the balance of trade (1K) because the higher wages can cause firms costs to rise resulting in higher export prices/more imports due to greater marginal propensity to import (1AN) • Increase in living standards/national happiness (1K) as these increases in real wages would enable people to access more goods and services (1AN) • Greater consumption (1K) as higher wages will increase the workers affordability of goods and services/increase workers demand for goods and services/AD increases (1AN) • Higher productivity (1K) as workers become more motivated to work harder/if firms replace workers with capital (1AN) • Increased tax revenue for the government (1K) from greater income tax/indirect taxes (1AN) NB Accept negative effects as KAA and positive effects as Evaluation (and vice versa)	

	Application Up to 2 marks for use of the reference to context, e.g., • Have been experienced especially in the jobs where severe shortages exist (1) • Rising wages could incentivise businesses to invest in labour-saving machinery and staff training (1) • Concern that these wage increases will harm the UK economy unless it is supported by higher productivity (1) • An accurately drawn and labelled AD/SRAS diagram (1) Evaluation Up to 2 marks for evaluative comments (1+1 or 2+0), e.g.: • The magnitude of the wage increase is relatively large (1) as the wage increases have been 'significant', so impact is likely to be considerable (1) • In the short-run, wage increases will have a sizable impact on inflation/real output (1) as any positive impact on productivity will take time to come into effect (1) • Impact on inflation depends on whether there has been an increase in real wages or nominal wages (1) as an increase in real wages is likely to raise living standards (1) • The increase in living standards will only occur if the nominal wages increase faster (1) than the rate of inflation (1)	(8)
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Question	Discuss supply-side policies that the UK Government could use to increase productivity. Indicative content
12(e)	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited. Quantitative Skill Assessed QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms Knowledge, Application and Analysis (8 marks) – indicative content • Supply-side policies are designed to increase productivity, competition, and incentives in an economy – it can be shown via a shift outward of the LRAS creating both actual and potential growth • Between 1997 and 2008, the average annual productivity growth was only 1.9%. Between 2009 and 2019 it fell to 0.7%. By 2021 productivity was nearly 20% below the level it would have reached if it had continued at 1.9% • Increased government spending on skills through investment in education and/or training – this would increase human capital and raise productivity • Increased government spending on infrastructure investment (e.g., roads or broadband) – this would reduce industry costs or improve access to market • Reducing the level of welfare benefits – this would incentivise unemployed to take jobs, work harder and increase output per worker of those in work • Privatisation - this may lead to increased competition, greater innovation due to higher R&D spending, and therefore higher productivity in the UK • Cutting cost of bureaucracy and/or deregulation of firms – this would raise efficiency and productivity by increasing competition between firms • Reducing corporation tax/subsidies – this incentivises firms to innovate by investing in technological advancements; hence increasing potential output • Lowering regulation (deregulation of markets) and/or increasing competition • Increasing the country's national minimum wage

Question	Examine the likely impact on India's real output of its 'increased expenditure on imported oil' (Extract A, line 7).	Mark
12 (d)	Knowledge 2, Application 2, Analysis 2, Evaluation 2 Quantitative Skill Assessed QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms Knowledge 1 knowledge mark for understanding of real output, e.g.: • Output adjusted for inflation (1) AND 1 knowledge mark for identifying the impact: • Fall in India's real output (1) Analysis Up to 2 marks for analysing the impact (1+1), e.g.: • Net trade is likely to decrease (1) and as net trade is a component of AD ($C+I+G+(X-M)$), AD is likely to fall (this can be shown on an accurately drawn AD/AS diagram) (1) • May result in SRAS shifting to the left (this can be shown on an accurately drawn AD/AS diagram) (1) as oil is a key commodity used in the production process (1) • Increases withdrawals from the circular flow of income (1) Application Up to 2 marks for reference to Extract A, e.g.: • Oil accounts for 30% of India's imports by value (1) • This is more than double the average of 14.7% for other major Asian economies, such as China, Japan and South Korea (1) Evaluation Up to 2 marks for evaluative comments (1+1 or 2+0), e.g.: • The magnitude of oil imports is relatively large at 30% (1) so impact on real output is likely to be very significant (1) • Real output may not fall/may increase if exports of services (1) are rising at a faster rate than imports of goods (1) • Impact on real output depends on elasticity of LRAS (1); real output will decrease if AD lies on elastic segment of LRAS (1) • Real output may not fall in long-run (1) as other components of AD rise, e.g. consumption (1) NB Accept negative impact on real output as KAA and positive impact as evaluation (or vice versa)	(8)



Question	Examine the likely impact on the UK's real output of 'the rising cost of energy' (Extract A, line 4).	Mark
12 (c)	Knowledge 2, Application 2, Analysis 2, Evaluation 2 Quantitative Skill Assessed QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms Knowledge 1 knowledge mark for understanding of real output, e.g.: - GDP/income adjusted for inflation (1) <i>AND</i> 1 knowledge mark for identifying the impact: - Fall in UK's real output (this can be shown on an accurately drawn AD/AS diagram) (1) Analysis Up to 2 marks for analysing the impact (1+1), e.g.: - Net trade is likely to decrease (1) and as net trade is a component of AD ($C+I+G+(X-M)$), AD is likely to fall (this can be shown on an accurately drawn AD/AS diagram) (1) - May result in AD shifting to the left (1) because the value of imports will increase/ Imports are withdrawals from the circular flow of income (1) - May result in SRAS shifting to the left (1) as energy is a key input used in the production process (this can be shown on an accurately drawn AD/AS diagram) (1) Application Up to 2 marks for reference to Extract A, e.g.: - Price of natural gas rose by more than 100% (1) - The UK is a net importer of natural gas (1) Evaluation Up to 2 marks for evaluative comments (1+1 or 2+0), e.g.: - The magnitude of the increase in the cost of energy/price of natural gas is very large at 100% (1) so the impact on UK's real output is likely to be highly significant (1) - Real output may not fall/may increase if exports of UK services (1) are rising at a faster rate than UK imports of goods (1) - Impact on real output depends on elasticity of the LRAS (1); real output will only decrease if AD lies on the elastic segment of the LRAS (1) - Real output may not fall in long-run (1) if other components of AD rise, e.g. consumption (1)	(8)

	- Depends on the reliance on natural gas (1) as to the extent of the shift in AS (1) - Forward markets may reduce the impact in the short-run (1) so SRAS may not shift (1)	
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Question	With reference to Figure 2 and Extract A, analyse two factors that influence business investment.	Mark
12(d)	Knowledge 2, Application 2, Analysis 2 Quantitative Skill Assessed QS5: Calculate and interpret index numbers QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms Knowledge and analysis 1 knowledge mark for identifying each factor and 1 analysis mark for linked development of each factor (2+2) e.g.: - Less economic activity (1K) there will be lower investment as firms expect future demand to decrease/increase more slowly (1AN) - Business confidence/expectations (1K) as firms have less confidence about the state of the UK economy, they are likely to invest less due to greater uncertainty about the future (1AN) - High costs of bureaucracy and strict planning regulations (1K) deter firms from investing as a result of the higher cost of production (1AN) - Lower profits (1K) result in less funds being available to pay for investment (1AN) NB Knowledge and analysis can focus on increased investment NB Analysis mark can only be awarded when the Knowledge mark is in context Application 1 mark for use of Figure 2, e.g., - Between 2010 and 2016, the index of business investment increased from nearly 71 to 102 / Between 2016 and 2020, business investment decreased by nearly 22% / In 2020 business investment decreased significantly (1) AND 1 mark for use of Extract A, e.g., - The UK's rate of economic growth has been low since 2020 / The UK's real GDP at the end of 2022 was smaller than it was at the start of 2020 / The UK's decision to leave the European Union in 2016 / Construction of infrastructure projects, such as building power plants and energy facilities / Global health crisis of 2020 /	(6)



Question Number	Indicative content	
14	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited. Quantitative skills assessed QS9: Interpret, apply and analyse information in written, graphical and tabular forms. Knowledge, application and analysis (12 marks) – indicative content Falling oil prices are beneficial to an economy because: - For economies which are net importers of oil, this will lead to a decrease in the value of their imports, <i>ceteris paribus</i>. This will: - Reduce a trade/current account deficit, meeting one of the government's macroeconomic objectives. - Reduce downward pressure on/increase AD in the economy (may be shown diagrammatically), leading to an increase in real GDP and average incomes, and an increase in employment. - Positive multiplier effects. - An increase in average incomes and an increase in employment is likely to improve the government's budget balance. - Costs of production for firms will fall, leading to a rise/rightward shift in SRAS (may be shown diagrammatically). <i>Ceteris paribus</i>, this will: - Decrease cost-push inflationary pressures in the economy, helping to achieve the macroeconomic objective of a low and stable rate of inflation. - Increase real GDP and average incomes in the economy. An increase in average incomes and employment is likely to improve the government's budget balance. - For economies which are net exporters of oil, this may encourage them to diversify their economies and reduce their reliance on oil, which may be beneficial in the longer term. NB Candidates only need to develop one of these two lines of argument for a L4 KAA mark.	
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models.



		Use of generic material or irrelevant information or inappropriate examples. Descriptive approach, which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.
		Evaluation (8 marks) – indicative content Falling oil prices may not be beneficial to an economy because: - For economies which are net exporters of oil, this will lead to a decrease in the value of their exports, <i>ceteris paribus</i>. This will: - Increase a trade/current account deficit, going against one of the government's macroeconomic objectives. - Put downward pressure on AD in the economy (may be shown diagrammatically), leading to less economic growth, downward pressure on average incomes, and a reduction in employment. - Negative multiplier effects. - A decrease in average incomes and a decrease in employment is likely to worsen the government's budget balance. - If this causes an increase in the quantity of oil used, it may be negative for the environment/a fall in the price of oil may disincentivise the creation/adoption of renewable energy production.

	General evaluation points: • Effects depend on how much oil prices fall by and how long they stay low. • Effects of a change in AD on real GDP depend on the level of spare capacity in the economy; the size of the multiplier ratio; and whether a Classical or Keynesian LRAS curve is used. • There is likely to be a time lag before effects are felt. • A decrease in inflation may not be beneficial if an economy's inflation rate is at or below target. • Effects on costs of production/SRAS depend on the structure of the economy/adoption of green production methods etc. • Different effects on different economies. • Economies which are more specialised in oil production will be affected more significantly. NB This answer is reversible, i.e. candidates may argue either way for KAA and the reverse for evaluation.	
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Section D

Question	Evaluate the view that very high global oil prices will always harm a country's macroeconomy.
13	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. Knowledge, Application and Analysis (12 marks) – indicative content Rising oil prices are harmful to an economy because: • For economies that are net importers of oil, this will lead to an increase in the value of their imports, <i>ceteris paribus</i>. This will: ○ Increase a trade/current account deficit, not meeting one of the government's macroeconomic objectives ○ Increase downward pressure on/decrease AD in the economy (may be shown diagrammatically), thus leading to a decrease in real GDP and average incomes, and an increase in unemployment ○ Negative multiplier effects and further reduction in AD/real GDP ○ A decrease in average incomes and an increase in unemployment are likely to worsen the government's budget balance • Costs of production for firms will increase, leading to a fall/leftward shift in SRAS (may be shown diagrammatically). <i>Ceteris paribus</i>, this will: ○ Increase cost-push inflationary pressures in the economy, thus not achieving the macroeconomic objective of a low and stable rate of inflation ○ Decrease real GDP and average incomes in the economy ○ Decrease in average incomes and an increase in unemployment are likely to worsen the government's budget balance • For economies that are net exporters of oil, this may discourage them to diversify their economies and increase their reliance on oil – they have less incentive to create/adopt renewable energy to protect the environment NB: Candidates may argue either way for KAA and the reverse for Evaluation NB: Award a maximum of level 3 if no reference to specific country(s)

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach, which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.



Evaluation (8 marks) – indicative content

Rising oil prices may not be harmful to an economy because:

- For economies that are net exporters of oil, this will lead to an increase in the value of their exports, *ceteris paribus*. This will:
 - Decrease a trade/current account deficit, meeting one of the government's macroeconomic objectives
 - Put an upward pressure on AD in the economy (may be shown diagrammatically), leading to more economic growth, upward pressure on average incomes, and a reduction in unemployment
 - Positive multiplier effects
 - An increase in average incomes and a decrease in unemployment are likely to improve the government's budget balance

General evaluation points:

- Effects depend on how much oil prices rise by and how long they stay high
- Effects of a change in AD on real GDP depend on the level of spare capacity in the economy; the size of the multiplier ratio; and whether a Classical or Keynesian LRAS curve is used
- There is likely to be a time lag before effects are felt
- An increase in inflation may not be beneficial if an economy's inflation rate is above its target rate of inflation
- Effects on costs of production/SRAS depend on the structure of the economy /adoption of green production methods etc.
- Different effects on different economies, e.g., economies that are more specialised in oil production will be affected more significantly/economies that are more dependent on oil will be affected more significantly
- Countries that are heavily dependent on oil imports will have an incentive to invest in renewable energy so benefitting the environment



Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Section A

Question Number	Quantitative skills assessed	Answer	Mark
1	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is C A is not correct because potential growth is illustrated by a rightward shift in the LRAS B is not correct because potential growth is illustrated by a rightward shift in the LRAS D is not correct because potential growth is illustrated by a rightward shift in the LRAS	(1)
2	QS2: Calculate, use and understand percentages, percentage changes and percentage point changes QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is C A is not correct because a fall in wholesale prices is likely to cause consumer prices to fall and real incomes to rise B is not correct because a fall in wholesale prices implies a fall in costs D is not correct because there are deflationary pressures which would make it more likely that the central bank would reduce interest rates	(1)
3	–	The only correct answer is D A is not correct because an increase in non-price competitiveness is likely to cause an increase in exports and a fall in imports B is not correct because a fall in real incomes is likely to reduce the demand for imports C is not correct because an decrease in the non-price competitiveness of a major trading partner's products is likely to cause the developed county's exports to increase its imports to fall	(1)

4	QS2: Calculate, use and understand percentages, percentage changes and percentage point changes QS4: Construct and interpret a range of standard graphical forms QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is A <i>B is not correct because Portugal's exports are dependent on consumption and the savings ratios of its trading partners</i> <i>C is not correct because the fall in the savings ratio is likely to cause higher consumption and more demand for goods and services leading to more demand for workers</i> <i>D is not correct because a lower savings ratio implies a reduction in withdrawals</i>	(1)
5	QS4: Construct and interpret a range of standard graphical forms QS8: Make calculations of elasticity and interpret the result QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is A <i>B is not correct because at the full employment level of real output, the LRAS would be perfectly inelastic</i> <i>C is not correct because the LRAS would be perfectly elastic at high levels of spare capacity</i> <i>D is not correct because the LRAS would be perfectly elastic at high levels of spare capacity</i>	(1)
6	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is B <i>A is not correct because there is a budget deficit of \$100bn</i> <i>C is not correct because the data relate to the budget and not to exports and imports</i> <i>D is not correct because there is a budget deficit which implies that there is a net withdrawal out of the economy</i>	(1)

Section A

Question	Quantitative skills assessed	Answer	Mark
1	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is A B is not correct as there were two periods of positive growth and two periods of negative growth C is not correct as Quarter 3 of 2019 saw negative economic growth D is not correct as there is only one quarter of negative growth	(1)
2	-	The only correct answer is D A is not correct as real wage inflexibility is where wages are unable to drop to equilibrium resulting in unemployment B is not correct as the graduates are economically active C is not correct as the graduates are employed	(1)
3	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is C A is not correct because AD would be shifted by changes in consumption, investment, government spending or net exports B is not correct because AD would be shifted by changes in consumption, investment, government spending or net exports D is not correct because improved labour productivity shifts LRAS to the right	(1)
4	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is A B is not correct as a net injection would occur when government spending exceeds tax revenue C is not correct as the current account of the balance of payments relates to exports and imports D is not correct as the current account of the balance of payments relates to exports and imports	(1)
5	QS9: Interpret, apply and analyse information in	The only correct answer is B	(1)

Section A

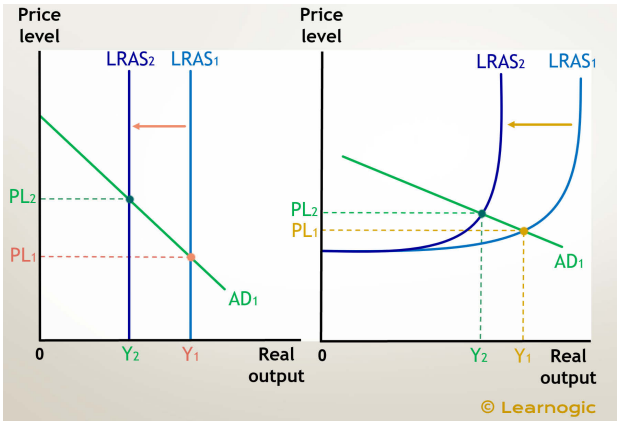
Question	Quantitative skills assessed	Answer	Mark
1	QS4: Construct and interpret a range of standard graphical forms	The only correct answer is C <i>A is not correct because this is an injection into the circular flow of income</i> <i>B is not correct because this is not a withdrawal</i> <i>D is not correct because this is an injection into the circular flow of income</i>	(1)
2	QS4: Construct and interpret a range of standard graphical forms QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is A <i>B is not correct because this conflict is best illustrated by the short-run Phillips curve</i> <i>C is not correct because this conflict is best illustrated by the short-run Phillips curve</i> <i>D is not correct because this conflict is best illustrated by the short-run Phillips curve</i>	(1)
3	QS4: Construct and interpret a range of standard graphical forms QS8: Make calculations of elasticity and interpret the result QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is B <i>A is not correct because the classical LRAS will be perfectly inelastic, and the economy will be operating at full capacity</i> <i>C is not correct because the economy will be operating at full capacity</i> <i>D is not correct because at full employment level of real output, the classical LRAS would be perfectly inelastic</i>	(1)
4	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is A <i>B is not correct because an increase in house prices will lead to positive wealth effects</i> <i>C is not correct because this is an impact on firms and not on existing homeowners</i> <i>D is not correct because an increase in house prices would result in greater confidence and then to an increase in consumer expenditure</i>	(1)
5	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is D <i>A is not correct because fiscal policy involves the use of taxation and government spending as policy instruments</i> <i>B is not correct because fiscal policy involves the use of taxation and government spending as policy instruments</i> <i>C is not correct because this will involve the ECB increasing its asset purchases</i>	(1)

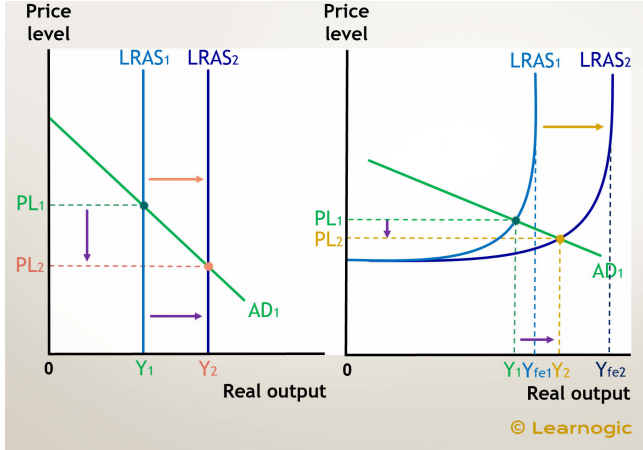
Section A

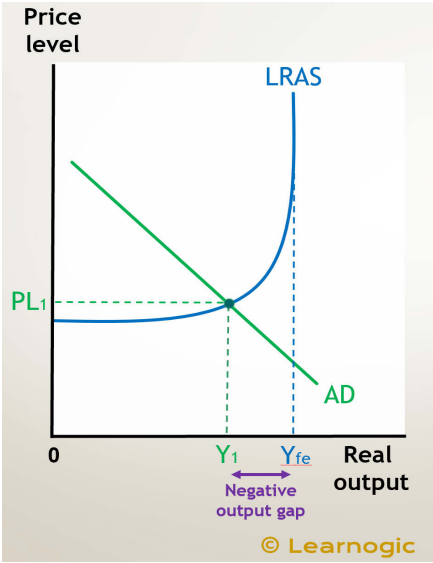
Question	Quantitative skills assessed	Answer	Mark
1	QS4: Construct and interpret a range of standard graphical forms QS8: Make calculations of elasticity and interpret the result QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is D <i>A is not correct because the classical LRAS is perfectly elastic when there is a high level of spare capacity</i> <i>B is not correct because the classical LRAS is perfectly elastic when there is a high level of spare capacity</i> <i>C is not correct because the classical LRAS curve is perfectly inelastic at the full employment level of real output</i>	(1)
2	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is A <i>B is not correct because cutting costs of bureaucracy is an example of a free market supply-side policy</i> <i>C is not correct because cutting costs of bureaucracy is an example of a free market supply-side policy</i> <i>D is not correct because cutting costs of bureaucracy is an example of a free market supply-side policy</i>	(1)
3	QS2: Calculate, use and understand percentages, percentage changes and percentage point changes QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is B <i>A is not correct as this is the percentage-point change</i> <i>C is not correct as this uses the incorrect equation: $\text{change/new} \times 100$</i> <i>D is not correct as this is the sum of the two percentages</i>	(1)
4	QS4: Construct and interpret a range of standard graphical forms QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is B <i>A is not correct because between Y and Z, the government's tax revenue is likely to increase</i> <i>C is not correct because between Y and Z, the rate of unemployment is likely to decrease</i> <i>D is not correct because between Y and Z, business confidence is likely to increase</i>	(1)
5	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	The only correct answer is A <i>B is not correct because this is likely to have caused a decrease in investment</i> <i>C is not correct because this is likely to have caused a decrease in investment</i> <i>D is not correct because this is likely to have caused a decrease in investment</i>	(1)

Section B

Question	Explain one possible effect of this change in net migration on Lithuania's long-run aggregate supply.	Mark
7	Answer Knowledge 1, Application 1, Analysis 2 QS2: Calculate, use and understand, percentages, percentage changes and percentage point changes Knowledge 1 mark for: • Knowledge of net migration e, g Net migration is immigration minus emigration (1) • Knowledge of/or drawing of a LRAS curve (Keynesian/ Classical)(1) Analysis Up to two marks for: • Reduction in productive capacity/fall in factors of production (1) • If skilled labour leaves, productivity may fall (1) • Identification of/or diagram showing leftward shift/decrease in LRAS (1) © Learnogic Application One mark for applying to Lithuania e.g.: • Net migration has fallen from 1.4% to -6.1% (1) • Net migration was positive and now negative (1) • Net migration has fallen by 7.5 percentage points (1) • More people now emigrate from Lithuania and immigrate to the country (1)	(4)

Question Number	Answer	Mark
8	Knowledge 1, Application 3 Quantitative skills assessed: QS4: Construct and interpret a range of standard graphical forms QS9: Interpret, apply and analyse information in written, graphical and tabular forms.  Knowledge 1 mark for drawing original AD and LRAS curves with correctly labelled axes. Application Up to 3 marks for the following information on diagram: 1 mark for leftward shift in LRAS and, due to the shift in LRAS, 1 mark for new lower real output level. 1 mark for new higher price level. NB Accept either Keynesian or Classical LRAS curves. NB Depending on the level of spare capacity shown on a diagram using a Keynesian LRAS curve, price level and real output level may decrease or stay the same.	(4)

Question	Draw a LRAS and AD diagram to show the effect of this net migration on the price level and real output for New Zealand.	Mark
8	Knowledge 1, Application 3 Quantitative skills assessed: QS4: Construct and interpret a range of standard graphical forms QS9: Interpret, apply and analyse information in written, graphical and tabular forms  Knowledge Correctly drawn original LRAS/AD diagram with correctly labelled LRAS/AD curves and axes (1) Application Up to 3 marks for the following information included on the diagram: • Drawing LRAS shifted to the right (1) • New equilibrium showing correct lower price level (1) (not rewarded if 'price' is used on axis) • New equilibrium showing correct higher real output/ income/GDP/Y (1) (not rewarded if 'quantity' is used on axis) NB also allow LRAS/AD diagram showing both an increase in LRAS and an increase in AD as follows • Drawing LRAS and AD shifting to the right (1) • New equilibrium showing correct price level (1) (not rewarded if 'price' is used on axis) • New equilibrium showing correct higher real output/ income/GDP/Y (1) (not rewarded if 'quantity' is used on axis) NB if only AD curve is shifted then maximum of 2 marks	(4)

Question	Draw a Keynesian AS/AD diagram to illustrate a negative output gap.	Mark
8	Knowledge 1, Application 3 Quantitative skills assessed: QS4: Construct and interpret a range of standard graphical forms QS9: Interpret, apply and analyse information in written, graphical and tabular forms  Knowledge Correctly drawn Keynesian AS and AD curves with correctly labelled axes (1) Application Up to 3 marks for the following information included on the diagram: • Labelling the AD/Keynesian AS equilibrium (Y_1) (1) • Labelling the full employment level of output (Y_{fe}) (1) • Correct labelling of the negative output gap (1)	(4)

Question	With reference to Figure 2 and Extract A, analyse two possible impacts of net migration on the UK economy. Answer	Mark
12(b)	Knowledge 2, Application 2, Analysis 2 Quantitative Skill Assessed QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms Knowledge and analysis Up to 2 knowledge marks for identifying two possible impacts of net migration on the UK economy and 1 analysis mark for linked development of each impact e.g.: • Lower productivity (1K) if there are more low skilled workers immigrating as they have low levels of human capital (1AN) / Higher productivity (1K) if there are more high skilled workers immigrating as they have high levels of human capital (1AN) • Greater labour market flexibility/employment (1K) as workers will take jobs where shortages/unfilled vacancies exist (1AN) • Increase in frictional unemployment (1K) as net migration can result in displacement of existing labour force: lead to workers moving between jobs to search for new employment (1AN) • Could increase the rate of economic growth (1K) if AD increases due to higher consumer spending in the economy (1AN) • Increase in government expenditure (1K) as demand for public goods and services will increase, e.g. schools/hospitals (1AN) • Increase in tax revenue (1K) as more people will be part of the labour force/start businesses paying higher income tax, VAT and corporation tax (1AN) Application Up to 2 marks for use of Figure 2, e.g., • Between 2010 and 2019 net migration increased by 5.9% (1+1) • Net migration was 256 000 in 2010 (1) and 271 000 in 2019 (1) • Highest net migration in 2015/Lowest net migration in 2012 (1) • More people immigrated to UK than people who emigrated (1) • Net migration was positive in each year from 2010 to 2019 (1)	(6)

Question	Between 2012 and 2022 the productivity rate in Turkey increased by 39.2%. Evaluate the likely benefits of an increase in the productivity rate. Refer to an economy of your choice in your answer.	
14	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. Knowledge, Application and Analysis (12 marks) – indicative content • Understanding of productivity: measures the efficiency of production. • It is usually measured as output per worker/output per hour worked • Increased productivity rate increases the productive potential of the economy, increasing LRAS and resulting in a rise in real output causing economic growth and a reduction in unemployment (may be shown diagrammatically) • An increase in LRAS could result in a decrease in the price level/lower inflationary pressures (may be shown diagrammatically) • Higher productivity rates may increase demand for exports. As export prices fall/the value of exports increases: improves the current account of the balance of payments/ balance of trade • Increased productivity rate can result in a greater incentive for businesses to invest: this leads to greater injections into the circular flow of income • A highly productive workforce may increase the demand for labour and real wages, increasing consumption and AD: hence real output (may be shown diagrammatically) • Higher productivity rate is likely to reduce unit costs and therefore increase company profits: this could result in an increase in investment and/or increase in wages of the workforce • Higher productivity rate is likely to increase tax revenue: this can lead to more government spending and potential multiplier effects on GDP NB Award a maximum of Level 3 for answers with no reference to an economy in their answer	
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context.



		A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.
Evaluation (8 marks) – indicative content • May conflict with government's environment objectives • Higher productivity may be the result of capital investment that may reduce employment of labour / structural unemployment • Workers may need to be retrained to move to a different sector • Magnitude of productivity rate improvement • Depends on relative productivity rates • Difficulty in measuring productivity rates e.g. especially service sector • Increased productivity may only occur in the long-run, so unlikely to have an immediate impact on real output • Other factors might be more significant for economic growth e.g. high consumption through demand-side policies • Impact on inflation on the shape of/elasticity of LRAS and position of AD • Current account of the balance of payments is also influenced by other factors e.g. exchange rate • Investment by businesses may be based more on confidence than productivity		
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.