Please check the examination details below before entering your candidate information

Candidate surname	Other names
StemUp Model Solution	

Centre Number | Candidate Number

Pearson Edexcel International Advanced Level

Time 1 hour 45 minutes

Paper reference **WEC12/01**

Economics

International Advanced Subsidiary
UNIT 2: Macroeconomic performance and policy

You must have:
Source Booklet (enclosed)

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **ALL** questions in Sections A, B and C.
- Answer **ONE** question in Section D.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*

Information

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

Advice

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

Turn over ▶

P72461A

©2022 Pearson Education Ltd.

B:1/1/1/1/1

P 7 2 4 6 1 A 0 1 2 8

Pearson

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 illustrates the conflict between the macroeconomic objectives of a low rate of inflation and a low rate of unemployment?

- ☐ **A** A long-run classical AS curve
- ☐ **B** An AD curve
- ☒ **C** A short-run Phillips curve
- ☐ **D** A SRAS curve

(Total for Question 1 = 1 mark)

2 In 2021 it was estimated that many workers in India left their jobs to search for new employment.

Which **one** of the following describes this cause of unemployment?

- ☐ **A** Demand deficient
- ☒ **B** Frictional
- ☐ **C** Seasonal
- ☐ **D** Structural

(Total for Question 2 = 1 mark)

3 The Government of Saudi Arabia estimates that, in 2022, its spending will be $255 billion and its tax revenue will be $279 billion.

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

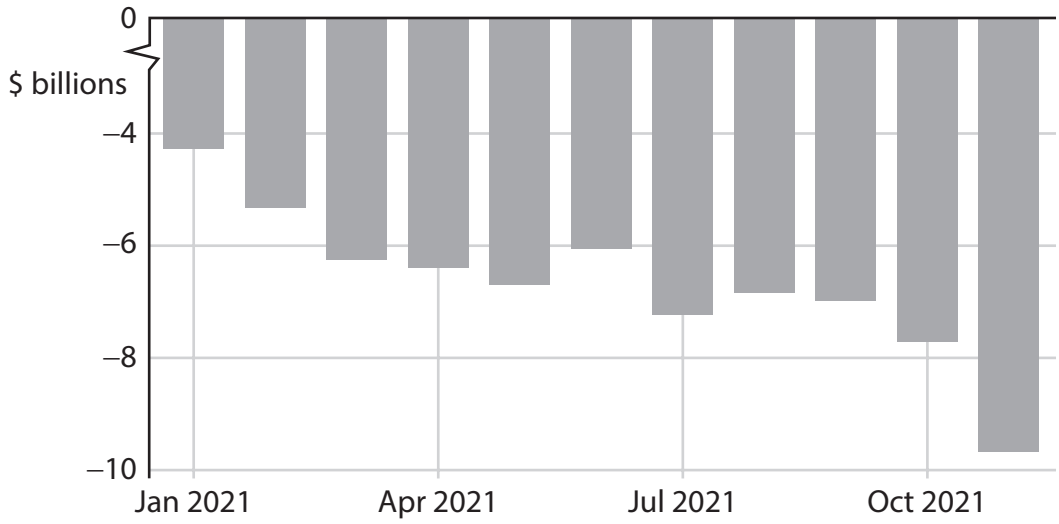
- ☒ **A** There will be a net withdrawal from the circular flow of income
- ☐ **B** There will be a net injection into the circular flow of income
- ☐ **C** There will be a balance of trade deficit
- ☐ **D** There will be a balance of trade surplus

(Total for Question 3 = 1 mark)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

4 The chart shows France's monthly balance of trade in goods and services, January 2021 to November 2021.



(Source: adapted from https://tradingeconomics.com/france/balance-of-trade)

Which **one** of the following is the most likely reason for this trend in France's balance of trade in goods and services?

- ☒ **A** An increase in the savings ratio
- ☒ **B** An increase in relative productivity
- ☒ **C** An increase in the exchange rate
- ☒ **D** An increase in the quality of exports

(Total for Question 4 = 1 mark)

5 Between January 2021 and December 2021 the central bank of the USA increased its asset purchases (quantitative easing) from $7.3 trillion to $8.8 trillion.

Which **one** of the following is the most likely impact of an increase in asset purchases (quantitative easing)?

- ☒ **A** A decrease in the availability of credit
- ☒ **B** A decrease in the rate of inflation
- ☒ **C** An increase in the rate of unemployment
- ☒ **D** An increase in the money supply

(Total for Question 5 = 1 mark)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

6 The table shows Ireland's Gross Domestic Product (GDP) between 2018 and 2020.

Year	GDP ($ billion)
2018	384.9
2019	399.1
2020	425.9

(Source adapted from: https://data.worldbank.org/)

Which **one** of the following represents the index number for 2020, if 2018 is the base year?

- ☒ **A** 90.37
- ☒ **B** 93.71
- ☒ **C** 106.72
- ☒ **D** 110.65

(Total for Question 6 = 1 mark)

TOTAL FOR SECTION A = 6 MARKS

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

BLANK PAGE

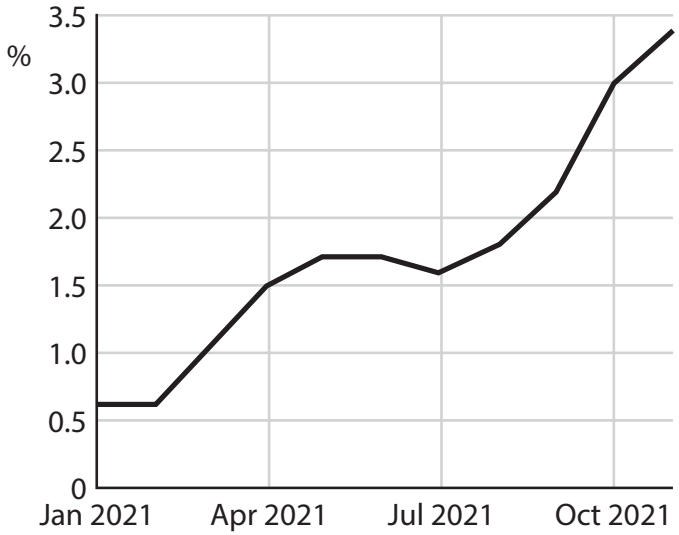
SECTION B BEGINS ON THE NEXT PAGE.

stemup.co.uk

SECTION B

Answer ALL questions in this section in the space provided.

7 The chart shows the annual rate of inflation in Denmark as measured by the Consumer Price Index (CPI), January 2021 to November 2021.



(Source: adapted from https://tradingeconomics.com/denmark/inflation-cpi)

With reference to the chart, explain **one** likely effect of this trend in the rate of inflation.

Inflation is a sustained increase in the general price level in an economy. The chart shows that Denmark's CPI inflation rate rose from about 0.6% in January 2021 to about 3.4% in November 2021, an increase of about 2.8 percentage points.

One likely effect is a fall in real incomes for people whose incomes do not rise as fast as prices, such as pensioners and students on fixed incomes. Each krone now buys fewer goods and services, so their purchasing power falls. This reduces their consumption and consumer confidence, and therefore lowers their living standards. The poorest households are hit hardest, so inequality may also increase.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

.....

.....

.....

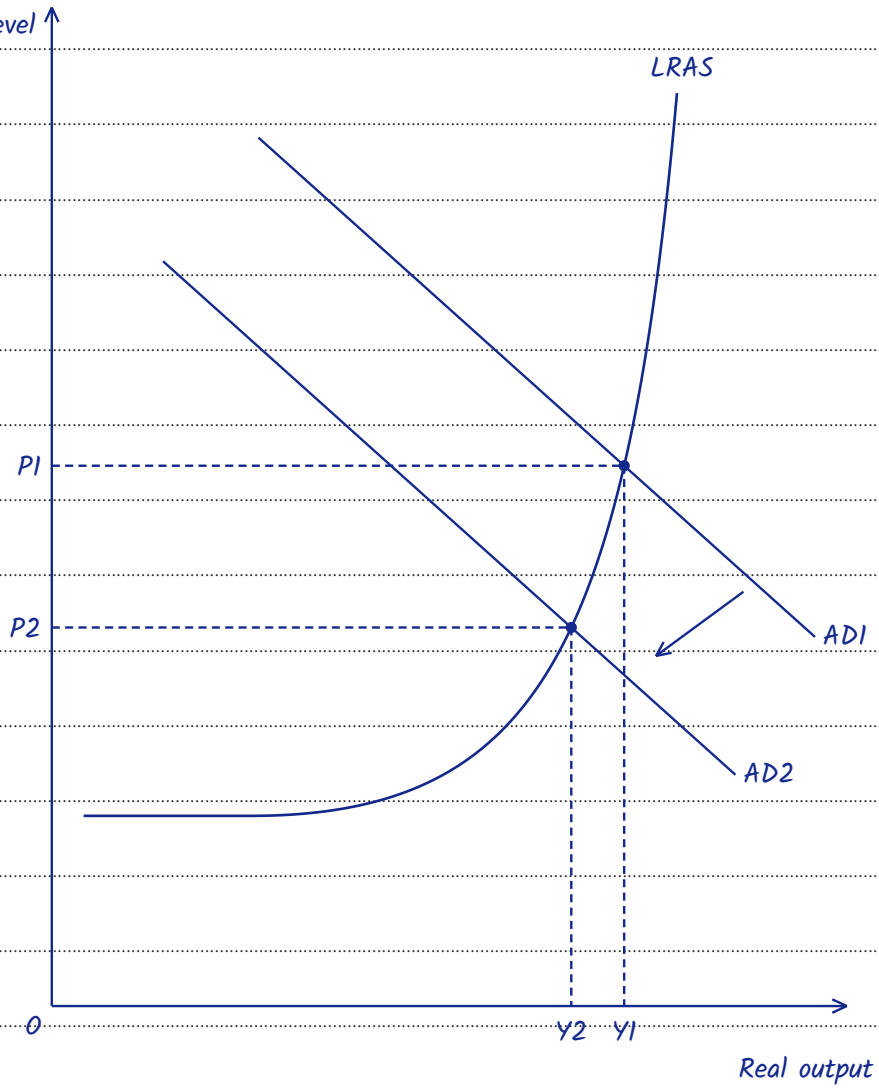
.....

(Total for Question 7 = 4 marks)

stemup.co.uk

8 In 2021 average house prices in the Philippines fell by over 10%. This had a significant impact on existing homeowners.

Based on this information, draw an AD and LRAS diagram to show the likely impact of this fall in house prices on the price level **and** real output in the Philippines.



The fall in house prices reduces homeowners' wealth (a negative wealth effect), so consumption falls and AD shifts left from AD1 to AD2. The price level falls from P1 to P2 and real output falls from Y1 to Y2.

(Total for Question 8 = 4 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

P 7 2 4 6 1 A 0 8 2 8
stemup.co.uk

9 The table shows the value of Canada's exports and imports of goods and services, $ billion, 2019–2020.

	Exports ($ billion)	Imports ($ billion)
2019	555.8	583.6
2020	477.1	510.8

(Source adapted from: https://data.worldbank.org/country/canada)

Calculate the *change* in Canada's balance of trade between 2019 and 2020.
Show your workings.

Balance of trade = value of exports – value of imports (X – M)

2019: $555.8bn – $583.6bn = –$27.8bn (deficit)

2020: $477.1bn – $510.8bn = –$33.7bn (deficit)

Change = –$33.7bn – (–$27.8bn) = –$5.9bn

So the trade deficit widened by $5.9 billion (about 21.2%) between 2019 and 2020.

(Total for Question 9 = 4 marks)

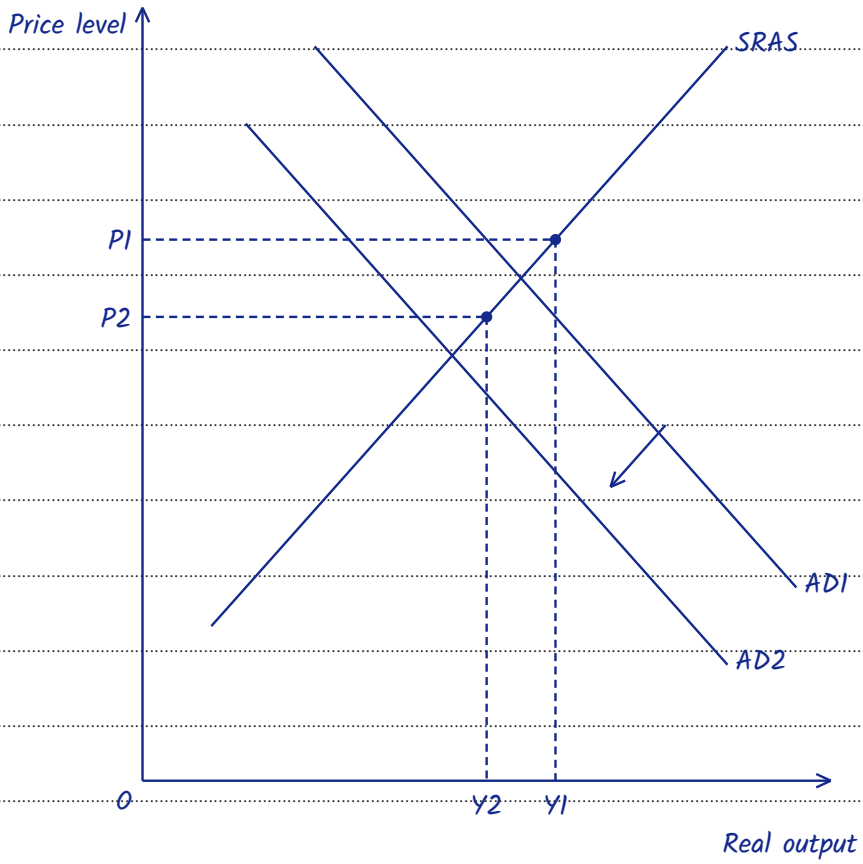
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

10 Between January 2021 and December 2021, Brazil's central bank increased its base interest rate from 2% to 9.75%.

With reference to this information, explain **one** likely macroeconomic impact of an increase in the base interest rate.

Brazil's base rate rose from 2% to 9.75%, an increase of 7.75 percentage points in 2021. One likely impact is a fall in consumption. Higher interest rates raise the cost of borrowing on credit cards, loans and mortgages, so households borrow and spend less, especially on durable goods such as cars. Saving also becomes more attractive because the return on savings rises. As consumption is a component of AD (C + I + G + (X − M)), AD shifts left from AD1 to AD2, so real output falls from Y1 to Y2 and the price level falls from P1 to P2, reducing inflation.



(Total for Question 10 = 4 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

11 The table shows the value of gross investment in Tanzania for 2015 and 2020.

	Gross investment ($ billions)
2015	15.5
2020	25.6

(Source: https://data.worldbank.org)

With reference to the table, explain what is meant by 'gross investment'.

Investment is spending on capital goods, such as machinery and buildings, which adds to the capital stock and is an injection into the circular flow of income. Gross investment is the total spending on capital goods including the replacement of worn-out capital, so gross investment = net investment + depreciation.

In Tanzania gross investment increased from $15.5bn in 2015 to $25.6bn in 2020, a rise of $10.1bn (about 65.2%). Part of this $25.6bn only replaces depreciated capital, so the increase in the capital stock (net investment) is smaller than this figure.

(Total for Question 11 = 4 marks)

TOTAL FOR SECTION B = 20 MARKS

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

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)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

12 (a) Define the term 'net migration' (Extract A, line 13).

(2)

Net migration is the number of people entering a country to live (immigration) minus the number of people leaving the country to live elsewhere (emigration) over a period of time.

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(b) With reference to Figure 2 and Extract A, analyse **two** possible impacts of net migration on the UK economy.

(6)

Figure 2 shows that net migration to the UK was positive in every year from 2010 to 2019, so more people immigrated than emigrated. It rose from 256 000 in 2010 to 271 000 in 2019 (about 5.9%), peaking at 329 000 in 2015, with a low of 161 000 in 2012.

Impact 1: lower productivity. Extract A says the Government wanted fewer low-skilled immigrants to raise productivity. If many migrants are low-skilled, they have low levels of human capital, so output per worker is low. Also, a ready supply of cheap labour means firms have less incentive to invest in training and capital equipment, so productivity growth stays weak (only 0.7% a year from 2009 to 2019).

Impact 2: higher economic growth. With net migration of around 250 000 a year, the labour force and population grow. Migrants fill unfilled vacancies where there are shortages, which increases the productive capacity of the economy (LRAS shifts right). They also spend their incomes, so consumption and AD rise, increasing real GDP. Higher employment also raises tax revenue from income tax and VAT.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

stemup.co.uk

(c) With reference to Figure 1, explain the term 'productivity'.

(4)

Productivity is the output per unit of input over a period of time, for example output per worker or output per hour worked. It measures how efficiently inputs are used to produce output.

Figure 1 shows that UK productivity rose from an index of 100 in 2010 to about 104.5 in 2020, a rise of about 4.5%. This was the lowest of the three countries: productivity in the USA rose by about 10% (to 110) and in Germany by about 9.5%, so UK productivity grew much more slowly.

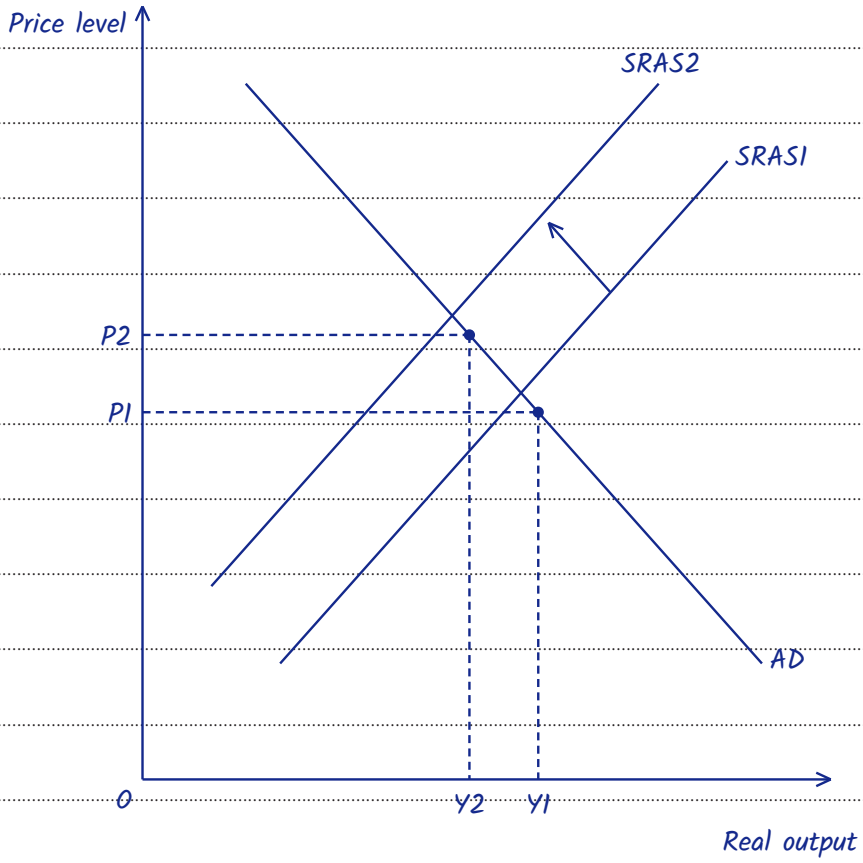
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

(d) Examine **two** likely macroeconomic effects of 'significant wage increases' (Extract A, line 21) on the UK economy.

(8)

Effect 1: cost-push inflation. Extract A says UK employers faced significant wage increases, especially in jobs with severe shortages. Wages are a large part of firms' costs of production, so higher wages raise costs and SRAS shifts left from SRAS1 to SRAS2. The price level rises from P1 to P2 as firms pass the higher costs on to consumers, and real output falls from Y1 to Y2.



However, the size of this effect depends on whether productivity rises too. Extract A notes that rising wages could incentivise firms to invest in labour-saving machinery and staff training. If output per worker rises as fast as wages, unit labour costs do not rise, so there is little inflation. Also, in the short run the impact will be large because the wage rises are "significant", while any productivity gains take time to come through.

Effect 2: higher consumption and AD. Higher wages increase workers' disposable incomes, so

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

they can afford more goods and services. Consumption rises, AD shifts right and real output and employment may increase, raising living standards and the Government's income tax and VAT revenue.

However, this depends on whether real wages rise. If prices rise as fast as nominal wages, real incomes do not increase and living standards do not improve. Some of the extra spending may also leak out on imports, worsening the balance of trade and reducing the effect on UK real output.

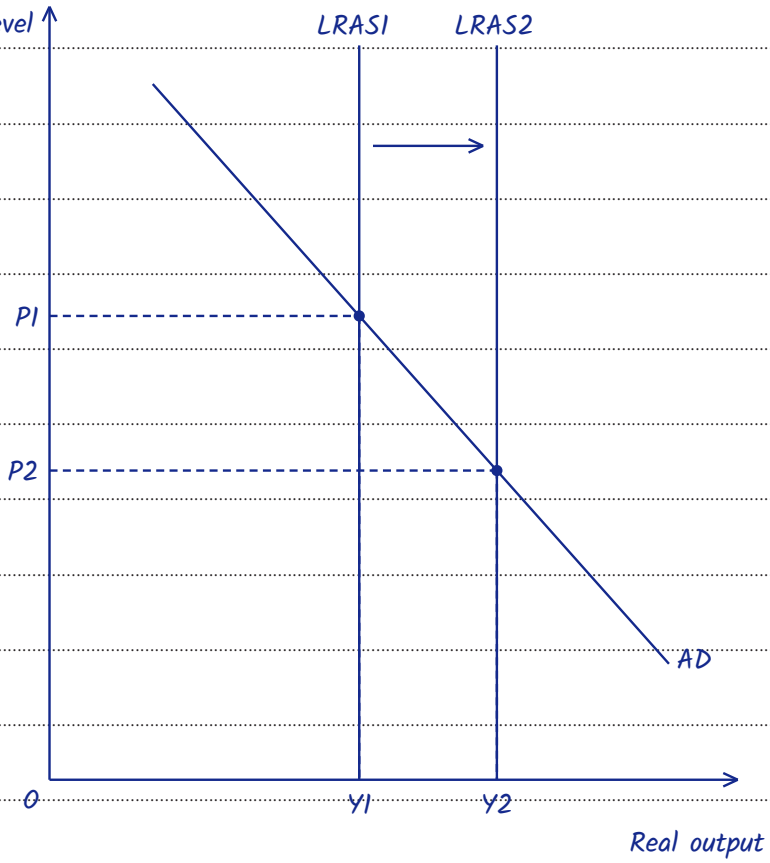
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

(e) Discuss supply-side policies that the UK Government could use to increase productivity.

(14)

Supply-side policies aim to increase the productive capacity of the economy by improving the quantity and quality of factors of production, incentives and competition. If they raise productivity, LRAS shifts right from LRAS1 to LRAS2, so real output can rise from Y1 to Y2 and the price level fall from P1 to P2. This matters for the UK because productivity growth fell from 1.9% a year (1997 to 2008) to only 0.7% (2009 to 2019), leaving productivity nearly 20% below its previous trend by 2021.



First, the Government could increase spending on education and training, as Extract A says it intends to invest in skills. Better-trained workers have more human capital, so output per worker rises. This would tackle the "inadequate skills" blamed for the UK's supply-chain problems. However, there are long time lags: new apprenticeships and education reforms may take years to raise productivity, and the outcome depends on the quality of the training and

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

whether it matches the skills firms need. There is also an opportunity cost, as the money could be spent on healthcare instead.

Second, the Government could spend more on infrastructure such as roads, rail and broadband. This reduces firms' transport and communication costs and gives them better access to markets, so the same inputs produce more output. Infrastructure spending also raises AD in the short run. However, projects are very expensive and can run over time and budget, which may increase the budget deficit, and the benefits depend on choosing the right projects.

Third, the Government could cut corporation tax or give investment allowances and subsidies for research and development. Extract A says firms have been cautious about investing in innovation and R&D after the 2008 financial crisis, leaving the EU and the health crisis. Lower taxes raise post-tax profits, so firms have more funds and incentives to invest in new technology and capital equipment, raising labour productivity. However, firms may use the extra profit for dividends rather than investment, especially if business confidence remains low, so the policy may be ineffective.

The Government also suggests cutting welfare benefits and low-skilled immigration to force firms to invest. This may incentivise people to work, but cutting immigration could worsen labour shortages and push up wages without raising output in the short run.

Overall, supply-side policies can raise UK productivity, but mainly in the long run. Figure 1 shows the UK has fallen well behind the USA and Germany, so the most effective approach is likely to be a combination of investment in skills and infrastructure, as the Government plans, carried out in partnership with businesses. Their success depends on the quality of spending, business confidence and the size of the time lags, so improvements may be slow.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(Total for Question 12 = 34 marks)

TOTAL FOR SECTION C = 34 MARKS

stemup.co.uk

SECTION D

Answer ONE question from this section.

Write your answer in the space provided.

EITHER

13 In 2020 nominal GDP was $6 billion for Guyana, $270 billion for Finland and $14 723 billion for China.

Evaluate the limitations of using GDP data to compare living standards between countries.

(Total for Question 13 = 20 marks)

OR

14 In 2021 the rate of economic growth in the Maldives was 18.87% and in India it was 12.55%.

Evaluate the potential conflicts between the objective of economic growth and **two** other macroeconomic objectives.

Refer to a country of your choice in your answer.

(Total for Question 14 = 20 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

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

Chosen question number: **Question 13** ☒ **Question 14** ☐

Write your answer here:

GDP is the total value of goods and services produced in a country in a year. Living standards refer to the level of material and non-material well-being of the population, such as income, health, education and the environment. GDP is often used to compare living standards, but there are several limitations.

First, the figures given are nominal GDP. Nominal GDP is measured at current prices, so it includes the effects of inflation. A country with high inflation may appear to have a large or fast-growing GDP even if the volume of output has not increased. To compare properly, real GDP, adjusted for inflation, is needed.

Second, total GDP ignores population size. China's GDP of $14 723 billion is over 54 times Finland's $270 billion, but China has about 1.4 billion people compared with Finland's 5.5 million. GDP per capita in Finland is therefore far higher (roughly $49,000 compared with about $10,500 in China), so Finns on average have a much higher material living standard. Guyana's $6 billion GDP looks tiny, but its population is below 1 million, so its GDP per capita is much higher than total GDP suggests.

Third, GDP figures are converted into dollars using market exchange rates, which do not reflect differences in the cost of living. Goods and services are usually much cheaper in Guyana and China than in Finland, so each dollar buys more there. Using purchasing power parity (PPP) exchange rates would give a more accurate comparison of what incomes can actually buy.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

Fourth, GDP excludes the informal and hidden economy, subsistence farming and unpaid work such as caring. In developing countries such as Guyana a large share of output is informal or for subsistence, so GDP understates real output and incomes much more than in Finland, making the gap in living standards appear larger than it really is.

Fifth, GDP says nothing about the distribution of income. A high GDP per capita may hide large inequality, with income concentrated among a small rich group, so most people may not enjoy high living standards. China has much greater inequality between urban and rural areas than Finland.

Finally, GDP ignores quality of life factors such as health, education, working hours, leisure and the environment. China's rapid growth has come with serious air pollution and congestion, which reduce well-being but are not deducted from GDP. Spending on cleaning up pollution even adds to GDP. Also, the composition of GDP matters: high spending on defence or on investment goods raises GDP but may not raise current living standards.

However, GDP still has important strengths. It is calculated by all countries using an internationally agreed method, so it is widely available, regularly published and well understood by policymakers. Income is a key determinant of living standards, because higher incomes allow people to buy more goods and services and governments to collect more tax to fund health and education. Countries with high real GDP per capita, such as Finland, usually also have high life expectancy and literacy, so GDP is strongly linked to wider well-being.

Many limitations can also be reduced rather than abandoning GDP. Using real GDP per capita at PPP deals with inflation, population and exchange rate problems. It can be combined with other indicators, such as the Human Development Index, which includes life expectancy and years of

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

schooling, and the Gini coefficient for inequality. However, these measures also rely on data that may be unreliable in developing countries.

The significance of the limitations depends on which countries are compared. For countries at a similar stage of development with similar prices and informal sectors, real GDP per capita is a fairly reliable guide. For very different countries such as Guyana, Finland and China, the limitations are much more serious. In addition, GDP in 2020 was distorted by the global health crisis, which hit countries differently, so single-year figures may not reflect long-run living standards.

In conclusion, total nominal GDP, as given in the question, is a poor measure for comparing living standards because it ignores inflation, population size and price differences. Real GDP per capita at PPP is a much better starting point and is still the most practical single indicator, but it should be used alongside measures of inequality, health, education and the environment to give an accurate comparison.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

TOTAL FOR SECTION D = 20 MARKS
TOTAL FOR PAPER = 80 MARKS

stemup.co.uk

BLANK PAGE

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

Pearson Edexcel International Advanced Level

Time 1 hour 45 minutes

Paper reference **WEC12/01**

△ ▲

Economics

International Advanced Subsidiary
UNIT 2: Macroeconomic performance and policy

Source Booklet

Do not return this Booklet with the question paper.

Turn over ▶

P72461A

©2022 Pearson Education Ltd.

B:1/1/1/1/1

P 7 2 4 6 1 A

Pearson

stemup.co.uk

Sources for use with Section C

The UK economy

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

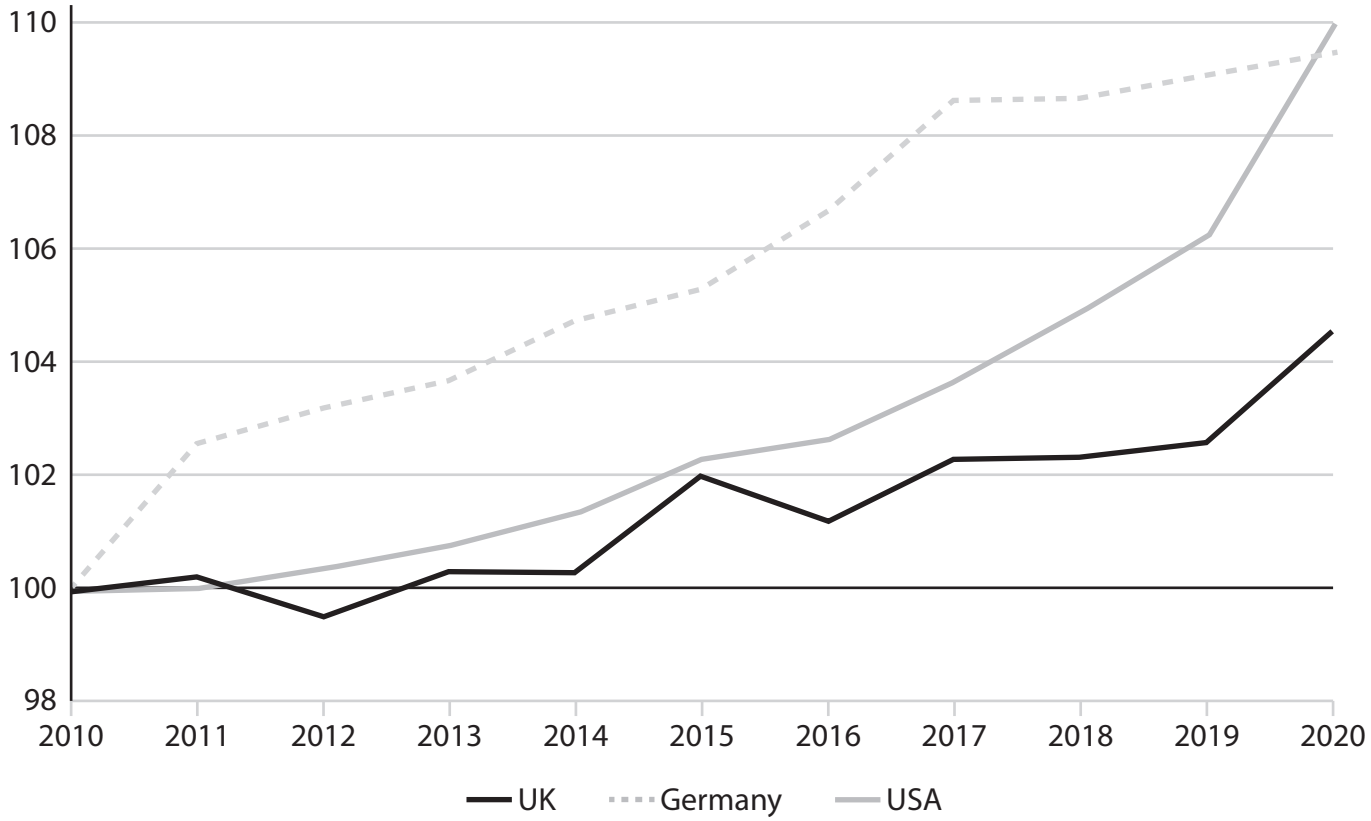


Figure 2 UK net migration, 2010 to 2019

Year	Net migration (thousands)
2010	256
2011	249
2012	161
2013	208
2014	309
2015	329
2016	248
2017	249
2018	232
2019	271

stemup.co.uk

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.

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%.

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:

- 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.

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.

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.

stemup.co.uk

BLANK PAGE

Acknowledgements

Figure 1 and Extract A adapted from FT, https://www.ft.com/content/e7a8cb3a-efcc-4d62-962b-d284545c14f6

Figure 2 adapted from https://www.migrationwatchuk.org/statistics-net-migration-statistics