Please check the examination details below before entering your candidate information

Candidate surname	Other names
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Centre Number | Candidate Number

Pearson Edexcel Level 3 GCE

Thursday 5 June 2025

Morning (Time: 2 hours)

Paper reference **9EC0/03**

Economics A

Advanced

PAPER 3: Microeconomics and Macroeconomics

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.
- There are two sections in this question paper.
- In Section A, answer **all** questions 1(a) to 1(c) and **one** question from 1(d) or 1(e).
- In Section B, answer **all** questions 2(a) to 2(c) and **one** question from 2(d) or 2(e).
- Answer the questions in the spaces provided
  – *there may be more space than you need.*

Information

- The total mark for this paper is 100.
- 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 ▶

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SECTION A

Read Figures 1 and 2 and the following Extracts A, B, C and D in the Source Booklet before answering Question 1.

Answer ALL Questions 1(a) to 1(c), and EITHER Question 1(d) OR 1(e).

Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

1 (a) Explain **one** reason why consumers buy less than the social optimum quantity of healthy food.

(5)

(b) With reference to Extract B, examine **two** likely reasons why wages in supermarkets are above the National Minimum Wage of £10.42.

(8)

(c) With reference to Figure 1 and Extract C, discuss whether supermarkets charging similar prices for petrol is evidence of collusion. Use game theory to support your answer.

(12)

EITHER

(d) Evaluate the microeconomic and macroeconomic effects of high levels of inflation. Refer to the UK or any other developed economy in your answer.

(25)

OR

(e) Evaluate the microeconomic and macroeconomic effects of a regional trade agreement between the UK and the EU.

(25)

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1 (a) Explain **one** reason why consumers buy less than the social optimum quantity of healthy food.

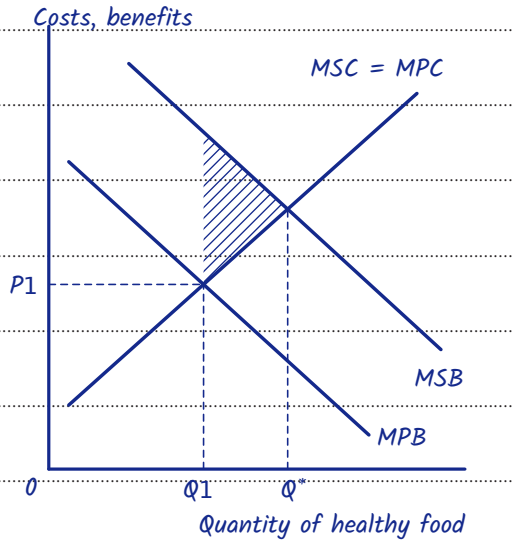
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The social optimum quantity is where marginal social benefit equals marginal social cost (MSB = MSC), so that society's welfare is maximised and there is allocative efficiency.

One reason consumers buy less healthy food than this is imperfect information. Consumers are not fully aware of, or underestimate, the long-term benefits of a healthy diet, such as lower risk of obesity and heart disease, so they make decisions on perceived benefit rather than actual benefit. Healthy food is therefore a merit good, and it also has positive externalities, because healthier people are more productive and place less pressure on the NHS.

This information failure is made worse by heavy marketing of unhealthy foods. Supermarkets used multibuy deals such as buy one get one free (BOGOF) and '3 for 2' on foods high in fat, salt or sugar and placed them at checkouts, store entrances and aisle ends (Extract A), so consumers behave irrationally and habitually buy cheaper, less healthy food.

In the diagram, perceived benefit (MPB) lies below the true benefit (MSB), so consumers buy Q1, where MPB = MSC, rather than the social optimum Q^*, where MSB = MSC. The shaded triangle is the welfare loss from under-consumption.



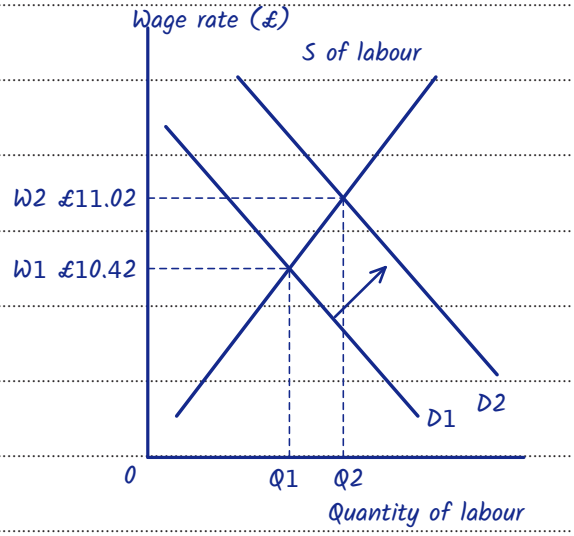
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(b) With reference to Extract B, examine **two** likely reasons why wages in supermarkets are above the National Minimum Wage of £10.42.

(8)

The National Minimum Wage (NMW) is the legal minimum hourly wage, set at £10.42 in April 2023 for workers aged 23 and over. Tesco now pays £11.02 per hour, about 5.8% above the NMW, rising to £11.95 in London, while Aldi pays £11.40 (Extract B).

The first reason is labour shortages and competition between supermarkets for in-store workers. Wages are determined by the demand for and supply of labour. In a tight labour market, the demand for shop workers is greater than the supply at the NMW, so there is a shortage. As shown in the diagram, an increase in demand for labour from D1 to D2 causes an extension in the supply of labour and raises the market wage from W1 (£10.42) to W2 (£11.02). Supermarkets are an oligopoly that compete through non-price competition, such as customer service, so they need enough reliable, motivated staff. Paying above the NMW reduces labour turnover and recruitment costs, can raise productivity, and protects market share and profit. This is why Sainsbury's and Asda both raised pay above £11 per hour in July 2023 to match their rivals.



The second reason is the cost of living crisis and trade union pressure. Figure 2 shows that by 2022 CPI inflation was 9.4% while wage growth was only 4.7%, so real wages were falling and workers'

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purchasing power was reduced. Supermarkets faced criticism over pay that did not rise in line with inflation, and some workers took industrial action, such as strikes, working closely with trade unions. A union acts as a monopoly seller of labour: by threatening to restrict the supply of labour it gives workers greater wage bargaining power, forcing employers to pay above the market wage. Supermarkets also want to avoid reputational damage from being seen as low payers, which could lose them customers.

However, the two reasons work in combination, and labour shortages are probably the most important, since the extract says supermarkets 'continue to compete for in-store workers'. This may only be a short-run situation: the NMW has since risen to £12.21, so the gap above it may have disappeared. Not all supermarkets behave the same way, and pay varies between regions, as Tesco's higher London rate shows, reflecting higher living costs there.

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(c) With reference to Figure 1 and Extract C, discuss whether supermarkets charging similar prices for petrol is evidence of collusion. Use game theory to support your answer.

(12)

Collusion is when firms in an oligopoly cooperate, rather than compete, to fix prices or output and so maximise joint profits, behaving like a monopoly. It can be overt, as in a cartel, which is illegal under UK competition law, or tacit, through price leadership without any formal agreement.

There is evidence that supermarkets may be colluding. UK petrol retailing is dominated by a few large supermarkets, so the market has a high concentration ratio and firms are interdependent. Figure 1 shows the price of unleaded petrol rising from about 103p per litre in 2016 to a peak of about 190p in 2022, and it remained around 143p in 2023, well above earlier levels. The CMA found that supermarkets' profits on fuel had doubled to 8% since 2017, and when the wholesale price of diesel fell, the average retailer margin reached 22p a litre, more than three times the long-term margin of 7p (Extract C). Prices that do not fall when costs fall suggest firms are avoiding a price war. Morrisons' boss admitted that supermarkets increased profits at the pumps.

Game theory explains why. In the payoff matrix, if both Tesco and Asda charge a high price, each earns £90m profit. However, each has an incentive to cut its price to gain market share, earning £120m while its rival earns only £40m. The dominant strategy for each firm, acting alone, is to charge a low price, so the Nash equilibrium is low price, low price, with only £60m each: a prisoners' dilemma. By

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colluding to keep prices high, both earn £90m, so the high and stable margins suggest firms have reached the collusive outcome, perhaps tacitly by following a price leader. Similar prices are consistent with the kinked demand curve too: rivals match price cuts but not rises, so prices are sticky.

	Tesco: High price	Tesco: Low price
Asda: High price	T £90m / A £90m	T £120m / A £40m
Asda: Low price	T £40m / A £120m	T £60m / A £60m

Profits (A = Asda, T = Tesco)
Nash equilibrium = Low, Low (£60m each)
Collusion = High, High (£90m each)

However, similar prices are not proof of collusion. In a competitive market, homogeneous products such as petrol must be sold at similar prices, because any firm charging more loses customers. All supermarkets face the same costs and trends, such as the wholesale price of oil and inflation, so prices rise and fall together, as in Figure 1 when prices fell sharply in 2020 and after the 2022 peak. Tesco, Sainsbury's and Asda denied making more profit from keeping petrol prices high, and supermarkets compete heavily through non-price competition, such as loyalty card points on fuel. The risk of CMA investigation and large fines is a strong deterrent to an explicit cartel, and all supermarkets said they would welcome a fuel price comparison website, which worked successfully in Northern Ireland.

Overall, the evidence points to tacit collusion or price leadership rather than an illegal cartel: high margins and slow price cuts suggest firms avoid price wars, but this may simply reflect interdependence. Greater price transparency should test this, since if margins fall once prices are published, supermarkets had been taking advantage of weak competition.

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EITHER

(d) Evaluate the microeconomic and macroeconomic effects of high levels of inflation. Refer to the UK or any other developed economy in your answer.

(25)

OR

(e) Evaluate the microeconomic and macroeconomic effects of a regional trade agreement between the UK and the EU.

(25)

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 1(d)** ☒ **Question 1(e)** ☒

Write your answer here:

Question 1(d)

Inflation is a sustained increase in the general price level, measured in the UK by the Consumer Prices Index (CPI). The Bank of England's target is 2%, but Figure 2 shows UK CPI inflation reached 9.4% in 2022, its highest for decades, while wage growth was only 4.7%. This was mainly cost-push inflation, caused by rising energy, petrol and food prices, as shown in Figure 1 by petrol rising to about 190p per litre in 2022.

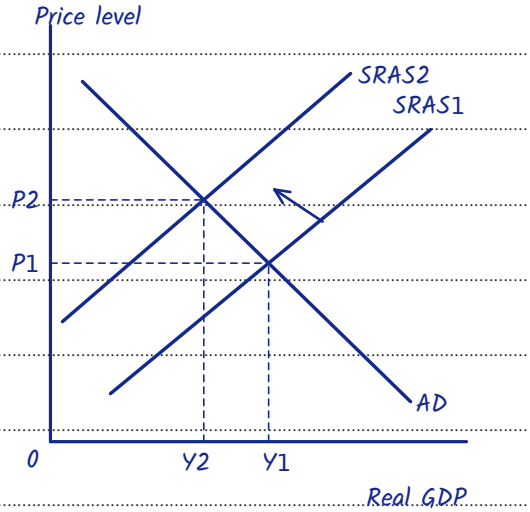
At a microeconomic level, the main effect is the erosion of real incomes. With prices rising by 9.4% and wages by 4.7%, real wages fell by about 4.7%, reducing the purchasing power of consumers and workers. Low-income households are hit hardest, because a larger share of their income goes on food, energy and fuel, so relative poverty and inequality increase. Consumers cut back, switching to cheaper inferior goods and delaying purchases of big-ticket items such as cars, which reduces revenue for many firms. At the same time, firms face higher costs of energy, raw materials and wages, so their average costs rise. As the

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diagram shows, higher costs shift SRAS to the left from SRAS1 to SRAS2, and for an individual firm a rise in AC with falling revenue squeezes profit. Lower profits and uncertainty about future costs and prices reduce investment, as future values are harder to predict.

High inflation also creates menu costs and shoe leather costs, and it causes wage-price spirals: workers expecting high inflation demand higher wages, as in the strikes by supermarket workers (Extract B), which raises firms' costs further. Savers lose as the real value of savings falls when interest rates are below inflation, while borrowers gain because the real value of debt falls. Asset prices change too: house prices may rise in value, while bonds lose value.

At a macroeconomic level, cost-push inflation causes stagflation: in the diagram the price level rises from P1 to P2 while real GDP falls from Y1 to Y2, so unemployment rises. UK goods become less internationally competitive if UK inflation is higher than in trading partners, so exports fall and imports rise, worsening the current account. Uncertainty causes a loss of confidence and reduces foreign direct investment. The policy response also matters: the Bank of England raised Bank Rate from 0.1% to 5.25% between 2021 and 2023, which increased monthly mortgage repayments for those on variable or expiring fixed rates, reducing consumption and AD further. The government gains from fiscal drag, as frozen tax thresholds pull more income into higher tax bands, and



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inflation lowers the real value of government debt, although index-linked gilts and benefits raise spending.

However, the effects depend on the magnitude of inflation. A small positive rate around the 2% target is useful as a buffer against deflation and allows real wages to adjust. The effects also depend on the type of inflation: demand-pull inflation is accompanied by rising output and lower unemployment, in line with the Phillips curve, so it is less damaging than cost-push inflation. Competitiveness depends on inflation in competitor countries: in 2022 inflation was also high in the US and the eurozone, so the UK's relative competitiveness changed little. The impact on households depends on the proportion of mortgage holders with fixed rather than variable rate mortgages, and on whether wages, pensions and benefits are index-linked. The effect on a firm depends on the products it sells and the workers it employs: discount supermarkets gained sales as consumers switched. The measure used matters too, as RPI is usually higher than CPI.

Finally, there are short-run and long-run effects. Inflation has since fallen back towards the 2% target, so many effects were temporary, but the fall in real incomes left a lasting cost of living crisis. In conclusion, high inflation is mostly damaging at both micro and macro levels, especially for low-income households and through lower investment and competitiveness, but the size of the damage depends on how high and persistent it is and whether it is cost-push or demand-pull.

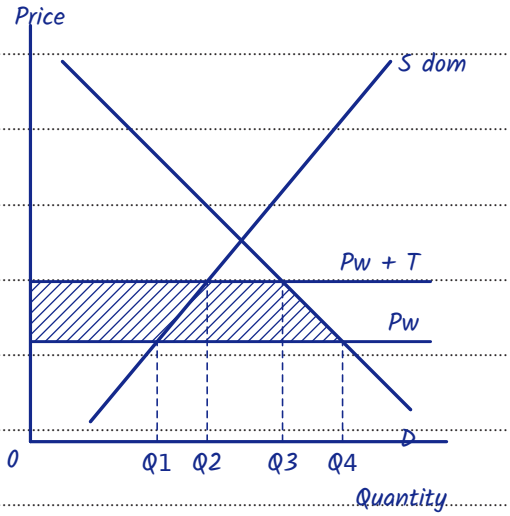
Question 1(e)

A regional trade agreement (RTA) is an agreement between countries in a region to reduce or remove trade barriers between them. The Trade and

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Cooperation Agreement 2021 between the UK and the EU means there are no tariffs or quotas on goods moving between them, provided the goods meet the 'rules of origin' (Extract D). It is a free trade agreement rather than a customs union, as each side sets its own external tariffs, and it does not include free movement of labour.

At a microeconomic level, the removal of tariffs lowers prices for consumers. As shown in the tariff diagram, removing a tariff reduces the price of imports from Pw + T to Pw, so domestic consumption rises from Q3 to Q4 and imports increase from Q2Q3 to Q1Q4. Consumer surplus increases, and the welfare loss triangles caused by the tariff are removed. Consumers have more choice of EU goods and higher real disposable incomes. UK firms gain cheaper imported raw materials and components, reducing their costs, and access to a market of about 450 million consumers allows them to grow and gain economies of scale, lowering average costs and raising revenue and profits. Greater competition from EU firms gives UK firms an incentive to become more efficient and innovate. Some TNCs may relocate to regenerate specific areas where they can serve both markets.



At a macroeconomic level, the agreement leads to trade creation, as higher-cost domestic production is replaced by lower-cost imports, and allows the UK to specialise according to comparative advantage, for example in pharmaceuticals and cars. Higher exports to the EU, the UK's

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largest trading partner, are an injection into the circular flow, shifting AD to the right and, through the multiplier, raising real GDP and employment. This could improve the current account of the balance of payments. Tariff-free access to the EU makes the UK more attractive for foreign direct investment, which increases the capital stock and shifts LRAS to the right, supporting long-run growth. However, the government loses tariff revenue on EU imports.

However, the benefits are smaller than when the UK was in the EU single market and customs union. 'Rules of origin' can be time consuming and complex, and some businesses do not claim the zero tariff because of excessive administrative costs (Extract D). UK businesses that re-export goods from outside countries with little further processing may still face tariffs, so the effect depends on how many goods meet the rules of origin criteria. There are also non-tariff barriers, such as customs checks, border delays and regulatory checks, which raise costs, especially for small firms, and services, which are around 80% of UK output, are not fully covered. Without free movement of workers, sectors such as hospitality, farming and care face labour shortages, pushing up wages and costs.

Trade diversion may occur if UK firms switch from cheaper non-EU suppliers to EU suppliers simply because they are tariff-free. The impact also depends on tariff costs as a proportion of a firm's overall costs, and on the position of AD relative to LRAS: if the economy is near full capacity, higher AD mainly causes inflation. More trade may increase transport and pollution, harming the environment. The effects are long run, as firms take time to adapt supply chains.

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In conclusion, a free trade agreement with the EU benefits consumers through lower prices and more choice, and benefits firms and the macroeconomy through economies of scale, exports and FDI. However, because of rules of origin, non-tariff barriers and the lack of free movement of labour, the gains are smaller than full membership of a customs union and single market would bring, and they depend on how well firms can manage the administrative costs.

(Total for Question 1 = 50 marks)

TOTAL FOR SECTION A = 50 MARKS

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SECTION B BEGINS ON THE NEXT PAGE.

SECTION B

Read Figure 3 and the following Extracts (E to G) in the Source Booklet before answering Question 2.

Answer ALL Questions 2(a) to 2(c) and EITHER Question 2(d) OR 2(e).

Write your answers in the spaces provided.

You are advised to spend 1 hour on this section.

2 (a) Using a demand and supply diagram, explain the cost of a subsidy on the market for cooking oil to the Indian government (Extract E, line 6).

(5)

(b) Examine **two** advantages of using the Human Development Index (HDI) to measure the level of economic development in India.

(8)

(c) With reference to Extract F, discuss the problems that might be involved with the buffer stock system in India.

(12)

EITHER

(d) Evaluate the microeconomic and macroeconomic reasons for the fall in poverty in India.

(25)

OR

(e) Evaluate the microeconomic and macroeconomic effects of rapid increases in population in India.

(25)

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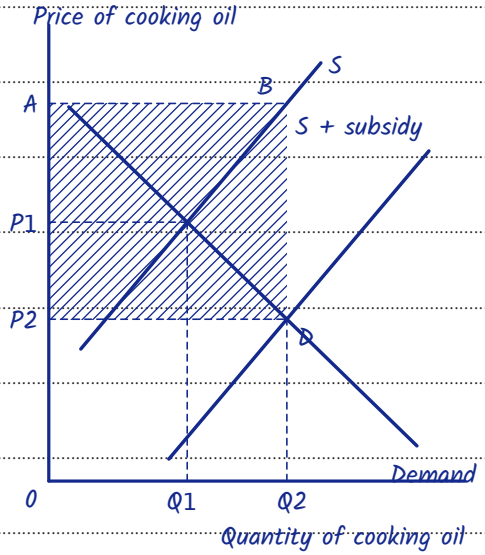
2 (a) Using a demand and supply diagram, explain the cost of a subsidy on the market for cooking oil to the Indian government (Extract E, line 6).

(5)

A subsidy is a payment by the government to producers to lower their costs of production. Its cost to the government is the subsidy per unit multiplied by the quantity sold, and this has an opportunity cost: the money could have been spent on other priorities such as sanitation, drinking water or education.

In the diagram, the subsidy lowers producers' costs, so supply of cooking oil shifts right from S to S + subsidy. The price consumers pay falls from P1 to P2 and quantity rises from Q1 to Q2. The subsidy per unit is the vertical distance B to D, and the total cost to the government is the shaded area ABDP2 (subsidy per unit × Q2). Part of the subsidy goes to consumers (P1 to P2 per unit) and part to producers.

India spent $2.3 million on subsidised cooking oil (Extract E), which improved access to cooking oil by 14.6 percentage points, helping to cut absolute poverty from 55.1% in 2006 to 16.4% in 2021 (Figure 3).



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(b) Examine **two** advantages of using the Human Development Index (HDI) to measure the level of economic development in India.

(8)

The Human Development Index (HDI) is a composite measure of economic development that combines three dimensions: health, measured by life expectancy at birth; education, measured by mean and expected years of schooling; and standard of living, measured by GNI per capita at purchasing power parity. It gives a value between 0 and 1, and a value closer to 1 means a country is more economically developed.

The first advantage is that the HDI is multidimensional, so it is a more accurate measure of living standards and quality of life than GDP alone. GDP per capita in India rose by 172.9% from $820.0 in 2006 to $2238.1 in 2021 ((2238.1 − 820.0) ÷ 820.0 × 100), but this does not show whether people are healthier or better educated. India's HDI rose from 0.611 in 2006 to 0.624 in 2016 and 0.633 in 2021, an increase of 0.022, showing that development has improved more slowly than income. Because the HDI includes health and education, it gives an indication of progress in these areas and of which areas require urgent government intervention, such as access to sanitation and drinking water (Extract E). This allows policymakers to adjust policies to improve development, and investment in health and education shows long-term growth potential on the supply side.

The second advantage is that the HDI is useful for international comparisons and comparisons over time. It is based on data that is relatively easy to collect and objective, and values are calculated by the UN for almost every country and updated annually, so India's progress can be compared with countries such as China or Bangladesh. This

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helps the government and international organisations to judge whether India's policies are working relative to other developing countries and to target aid.

However, the HDI does not consider income distribution or inequality, so India's rising GNI per capita may hide large gaps between rich and poor, urban and rural areas, and men and women. It ignores environmental damage, political freedom and deprivation. Its components, such as mean years of schooling and life expectancy, change only slowly, so it is less responsive to short-term changes. Other measures, such as the Multidimensional Poverty Index or the inequality-adjusted HDI, could therefore be more effective for India.

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(c) With reference to Extract F, discuss the problems that might be involved with the buffer stock system in India.

(12)

A buffer stock scheme is a form of government intervention to stabilise the price of a commodity and farmers' incomes. The government sets a minimum (floor) price and a maximum (ceiling) price. When there is a good harvest and the price would fall below the minimum, it buys up the surplus and stores it; when there is a bad harvest and the price would rise above the maximum, it releases stock onto the market. India must maintain a buffer stock of 11 million tonnes of wheat and 10 million tonnes of rice, purchased from farmers at the minimum support price (Extract F).

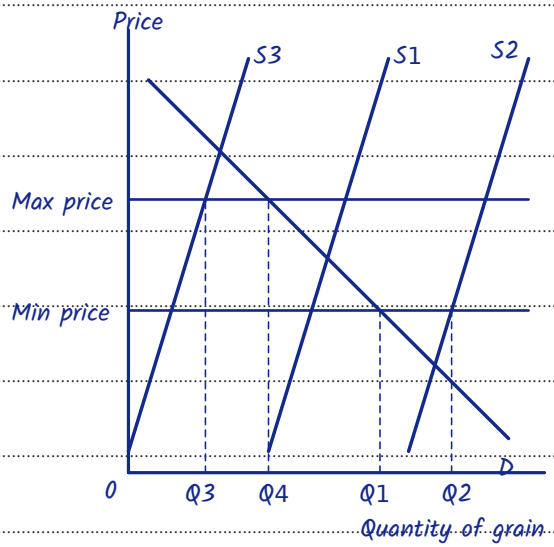
In the diagram, a good harvest shifts supply from S1 to S2, so the price would fall below the minimum price, and the government must buy the surplus Q1 to Q2 to keep the price at the minimum. A bad harvest shifts supply to S3, and the government sells Q3 to Q4 from stock to keep the price at the maximum.

One problem is the cost and opportunity cost. The government must pay farmers for the grain and pay for secure warehouses across the country, storage, security and transport. This is a fiscal burden with an opportunity cost, as the money could be spent on healthcare, education or sanitation. Grain is perishable, so quality deteriorates in storage and some may be wasted through pests or damp.

A second problem is setting the right price. If the minimum support price is set too high, there will be surpluses every year and stocks will keep growing, which is costly. This distorts price signals: Extract F says farmers are encouraged to produce more without any consideration of

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sustainability, so resources such as water and land are over-used, which is a government failure. Large stocks may be dumped on world markets, lowering prices for farmers elsewhere; India is the world's largest rice exporter. If the ceiling price is set too low, or there are consecutive bad harvests, the scheme can run out of stock, as during the global health crisis 2020 to 2022, when free food to nearly 800 million people ran buffer stocks down. Consecutive good harvests may mean the government runs out of funds or storage to buy stock. The scheme does not prevent all price fluctuations, so farmers' revenues can still fluctuate.



However, the buffer stock scheme has clear advantages. It helped India move from famine to self-sufficiency in most foods and allowed the government to distribute free food at a time of crisis, reducing starvation and food poverty. Price stability maintains farmers' incomes and gives certainty for planning investment and output. In theory it can be cheap to run, buying at low prices and selling at high prices. The size of the buffer stock, 21 million tonnes, is small relative to a population of 1.4 billion, so it may be too small rather than too large. Overall, the main problems depend on setting the minimum price at the right level; we lack information on storage and waste costs to judge how serious they are.

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EITHER

(d) Evaluate the microeconomic and macroeconomic reasons for the fall in poverty in India.

(25)

OR

(e) Evaluate the microeconomic and macroeconomic effects of rapid increases in population in India.

(25)

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 2(d)** ☒ **Question 2(e)** ☒

Write your answer here:

Question 2(d)

Absolute poverty is when people cannot afford basic needs such as food, shelter and clean water, measured by the World Bank as living on under US$2.15 a day. In India the proportion of people living in absolute poverty fell from 55.1% in 2006 to 27.7% in 2016 and 16.4% in 2021 (Figure 3), and 135 million Indians escaped absolute poverty in recent years (Extract E), out of a population of 1.4 billion.

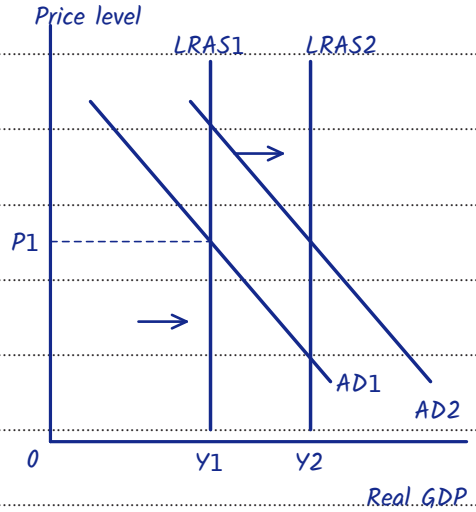
The main macroeconomic reason is rapid economic growth. GDP per capita rose from $820.0 to $2238.1 between 2006 and 2021, an increase of 172.9%. As shown in the diagram, investment and a larger, more productive workforce shift LRAS to the right from LRAS1 to LRAS2, while higher AD (AD1 to AD2) raises real GDP from Y1 to Y2. More output creates jobs, reducing unemployment, so more households earn incomes above the poverty line, and this trickle-down effect has lifted millions out of poverty. Since India opened up its economy to the private sector in the 1980s and 1990s (Extract G), foreign direct investment by TNCs in IT services and manufacturing has increased the

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capital stock and brought technology.

A second macro reason is the demographic dividend. As a majority of India's population is of working age (15 to 64 years), the dependency ratio falls, so more people earn incomes and each worker supports fewer dependants. This raises household incomes and saving; according to the Harrod-Domar model, higher savings fund more investment and growth. Government spending on infrastructure, education and healthcare has also raised human capital, so workers are more productive and can earn higher wages.

At a microeconomic level, the government's dedicated focus on improving access to sanitation, nutrition, cooking oil, banking services, drinking water and electricity (Extract E) has directly raised living standards.



Subsidies lower the cost of living: the $2.3 million provision of subsidised cooking oil improved access by 14.6 percentage points. Access to banking services lets the poor save safely, borrow and receive welfare payments directly, while electricity allows small businesses to work longer and be more productive. Free food distribution from buffer stocks to nearly 800 million people during the global health crisis (Extract F) prevented people falling back into poverty, and minimum support prices protect farmers' incomes. Greater occupational and geographical mobility of labour, as workers move from low-productivity agriculture to higher-paid urban jobs, raises wages, as in the Lewis model.

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However, the size of the fall depends on how poverty is measured. Absolute poverty measured at $2.15 a day ignores relative poverty; inequality in India has risen, so many people remain only just above the line and are vulnerable to price rises. HDI only rose from 0.611 to 0.633, suggesting improvements in health and education have been much slower than the fall in poverty. There are regional variations: poverty has fallen faster in urban states than in poorer, more rural states such as Bihar.

It is a combination of factors, but economic growth is probably the most significant, because without higher incomes and tax revenue the government could not afford the subsidies and services in Extract E. Government provision has a more direct and faster effect on the poorest, while growth works with time lags. The significance of factors changes over time: the demographic dividend will only continue to reduce poverty if India creates enough well-paying jobs (Extract G), and subsidies have an opportunity cost and may not be sustainable. Some 16.4% of the population, over 200 million people, are still in absolute poverty.

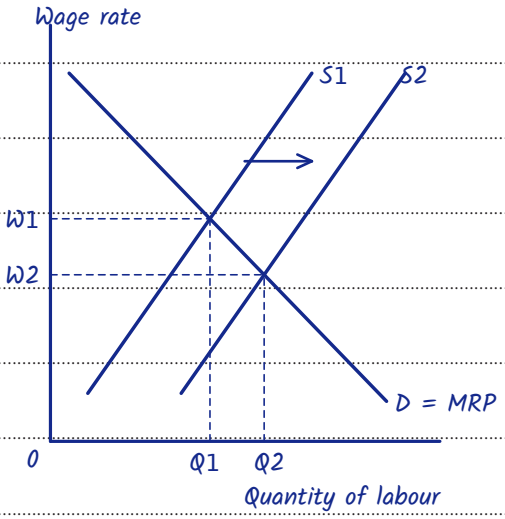
In conclusion, poverty in India has fallen mainly because of rapid economic growth after opening up the economy, supported by government spending on basic services and subsidies. The fall is large but the poverty measure is narrow, and continued progress depends on job creation and reducing inequality.

Question 2(e)

Population growth is an increase in the number of people living in a country, caused by birth rates above death rates and net migration. In May 2023 India overtook China as the country with the highest

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population, reaching 1.4 billion (Extract G).



At a microeconomic level, rapid population growth increases the supply of labour. As shown in the diagram, supply shifts right from S1 to S2, so the wage rate falls from W1 to W2 and employment rises from Q1 to Q2. Lower labour costs reduce firms' average costs, raising profits and international competitiveness, and encourage labour-intensive production rather than capital-intensive production. Firms also face higher demand for their products from a larger market, raising revenue, and the derived demand for labour increases. However, a larger population increases demand for water, housing, food, energy, healthcare and transport, raising prices and causing shortages, such as waiting lists in hospitals. Rapid urbanisation causes congestion, slums and pollution, which are external costs, and the over-use of land and water to grow food is unsustainable (Extract F).

At a macroeconomic level, a growing young population creates a demographic dividend, when a majority of the population is of working age (15 to 64 years), which policymakers view as an engine for further economic development (Extract G). A larger workforce increases productive potential, shifting LRAS and the PPF outwards, and higher consumption and investment shift AD to the right, raising real GDP. A large market and cheap labour attract FDI from TNCs, and more workers pay tax, increasing government revenue for infrastructure. India's GDP per

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capita rose from $820.0 to $2238.1 between 2006 and 2021, showing that growth has outpaced population growth. However, if AD rises faster than LRAS, demand-pull inflation results, while shortages of food and energy cause cost-push inflation. If there are not enough jobs, unemployment and underemployment rise, increasing poverty and inequality and reducing economic development.

However, the effects depend on the speed of population growth. In 1967 a minister called it 'the greatest obstacle' to development because of its 'alarming rate', but population growth in India has since slowed. The effects depend on the age structure: a falling dependency ratio is beneficial, but in the long run the large working-age population will age. They also depend on skills: India 'needs enough well-paying jobs designed to serve the modern, urban economy', so without education and training the extra workers may be unskilled and remain in low-productivity agriculture or the informal sector. Robotic replacement may reduce demand for unskilled labour.

The impact on growth and inflation depends on the level of spare capacity and on government policy, such as investment in infrastructure, housing and planning to limit environmental damage. Wage costs as a proportion of total costs determine how much firms gain from cheaper labour. There are time lags: babies born now only join the workforce in about 18 years, so the short-run effect is a higher dependency burden.

In conclusion, rapid population growth gives India a large workforce and market that can drive growth through the demographic dividend, but it also puts great pressure on resources, the environment and public services. Whether the overall effect is positive depends on India creating

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enough well-paying jobs and investing in education and infrastructure.

(Total for Question 2 = 50 marks)

TOTAL FOR SECTION B = 50 MARKS
TOTAL FOR PAPER = 100 MARKS

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Pearson Edexcel Level 3 GCE

Thursday 5 June 2025

Morning (Time: 2 hours)

Paper reference **9EC0/03**

Economics A

Advanced

PAPER 3: Microeconomics and Macroeconomics

Source Booklet

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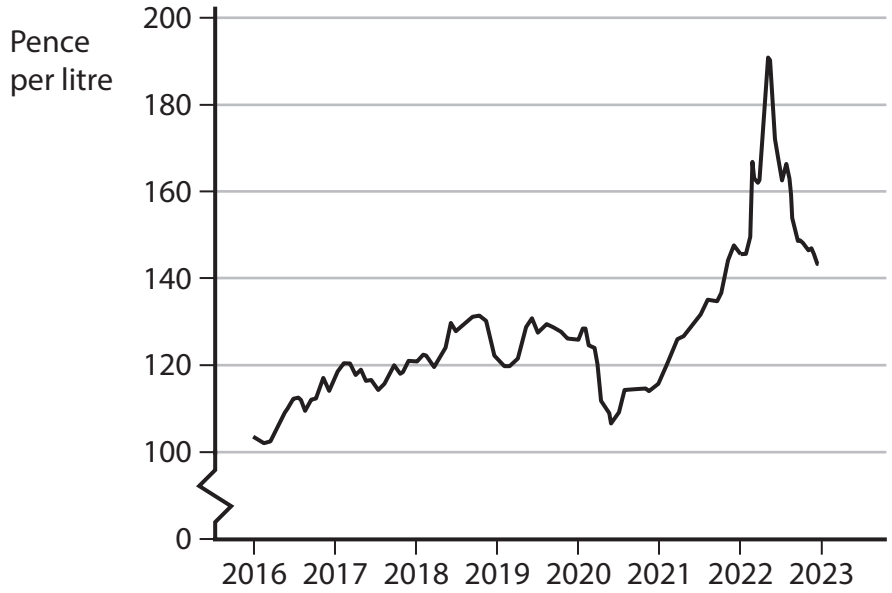
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Sources for use with SECTION A

Read Figures 1 and 2 and the following Extracts A, B, C and D before answering Question 1.

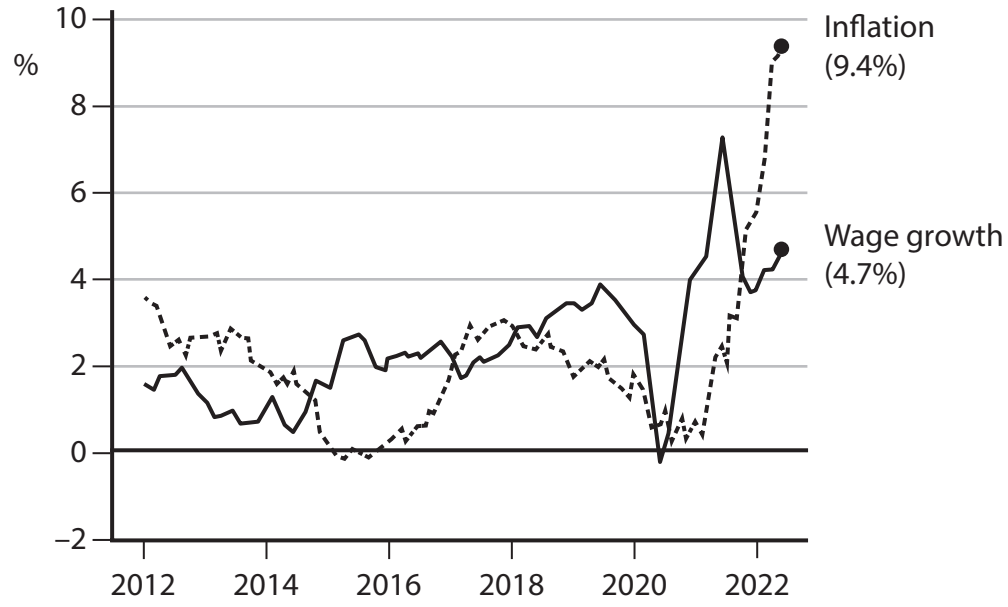
The cost of living in the UK

Figure 1: The price per litre of unleaded petrol in the UK, in pence, 2016–2023



(Source adapted from: RAC)

Figure 2: UK inflation, as measured by CPI, and wage growth (excluding bonuses), 3-month averages, 2012–2022



(Source adapted from: ONS)

Extract A

Supermarket restrictions on multibuy deals and advertising

Government rules limiting the location of unhealthy foods in shops began in 2022. Less healthy products are no longer promoted in key locations, such as checkouts, store entrances, aisle ends and their online equivalents. Rules banning multibuy deals on foods and drinks high in fat, salt or sugar (HFSS) – including buy one get one free (BOGOF), '3 for 2', and restrictions on free refills for soft drinks – were due in October 2023. The restrictions banning HFSS adverts on TV before 9pm and paid-for adverts online were set for January 2024.

(Source adapted from: https://www.gov.uk/government/news/government-delays-restrictions-on-multibuy-deals-and-advertising-on-tv-and-online)

Extract B

Supermarket pay in 2023

Supermarkets have been increasing their hourly pay rates and most now pay significantly more than the National Minimum Wage, which was set at £10.42 in April 2023.

Tesco made its biggest ever investment in employee pay in 2023, spending £230 million to finance an increase in its basic hourly rate of pay, to £11.02 per hour, rising to £11.95 in London.

The pay increase is the latest boost in employment benefits as supermarkets continue to compete for in-store workers, with Sainsbury's and Asda both increasing pay to above £11 per hour in July 2023, while Aldi pays £11.40 an hour.

Supermarkets have found themselves facing criticism over pay that did not rise in line with inflation. Some workers are taking industrial action, such as strikes, working closely with trade unions.

(Source adapted from: https://www.grocerygazette.co.uk/2023/02/22/supermarket-pay-rate-2023/)

Extract C

Supermarket petrol pricing

In 2023 David Potts, the boss of Morrisons, admitted that supermarkets increased profits at the petrol pumps as he was questioned in a parliamentary committee alongside executives from Tesco, Sainsbury's and Asda who denied they were making more profit from keeping petrol prices high.

A Competition and Markets Authority (CMA) report indicates that supermarkets' profits have doubled to 8% on fuel since 2017. It is expected to recommend that supermarkets must share local fuel prices on a comparison website in order to increase transparency and help bring down prices – a strategy tried successfully in Northern Ireland. All the supermarkets said they would welcome such a move.

In 2023, the RAC motoring group said that a price checker would be welcome but blamed high prices on the domination of petrol retailing in the UK by a few large supermarkets. "When the wholesale price of diesel fell this spring, we saw average retailer margin reach 22p a litre which was more than three times the long-term margin of 7p. This cannot be allowed to continue when households are having to contend with a cost of living crisis," an RAC spokesperson said.

At the committee, one politician, Jane Hunt, said: "In 1978 there were many more supermarkets. Now there are very few…are you in fact a cartel?"

(Source adapted from: https://www.theguardian.com/business/2023/jun/27/morrisons-boss-admits-supermarket-chains-have-hiked-profits-on-petrol)

Extract D

EU trade relations with the UK

The Trade and Cooperation Agreement 2021 between the EU and the UK means that there are no tariffs or quotas on goods moving between the EU and UK, provided those goods meet the 'rules of origin' of a good, based on where the products or materials used in their production come from. They prevent goods manufactured in outside countries being transported through the UK (or the EU) to avoid paying tariffs.

To benefit from the zero tariff, businesses must show the origin of their goods. A product qualifies as 'originating' if it is 'wholly obtained' in the UK and EU or has been substantially transformed in one or both markets. That is why UK businesses that re-export goods from outside countries with little or no further processing, may still face tariffs when trading with EU member states.

'Rules of origin' can be time consuming and complex. Some businesses cannot or do not wish to claim zero tariff because of the excessive administrative costs to firms.

(Source adapted from: https://commonslibrary.parliament.uk/new-customs-rules-for-trade-with-the-eu/)

Sources for use with SECTION B

Read Figure 3 and the following Extracts (E to G) before answering Question 2.

The economy of India

Figure 3: Selected economic data for India, 2006–2021

Year	GDP per capita (US$)	Human Development Index (HDI) value	% people living in absolute poverty
2006	820.0	0.611	55.1
2016	1 714.3	0.624	27.7
2021	2 238.1	0.633	16.4

(Source adapted from: https://www.statista.com/statistics/1272613/india-multidimensional-poverty-index/; https://data.worldbank.org/indicator/; UN Human Development Reports)

Extract E

135 million Indians escape absolute poverty in recent years

Absolute poverty in India, measured by the number of people living on under US$2.15 a day, has fallen dramatically over the last 15 years. The government's dedicated focus on improving access to sanitation, nutrition, cooking oil, banking services, drinking water and electricity has led to significant advances in these areas. The $2.3 million provision of subsidised cooking oil has positively transformed lives, with a 14.6 percentage points improvement in the access to cooking oil. 5

(Source adapted from: https://pib.gov.in/)

Extract F

Buffer stocks in India

The Indian government is required to maintain a buffer stock of 11 million tonnes of wheat and 10 million tonnes of rice. The grains are purchased from farmers at the minimum support price and stored in secure warehouses across the country. India, once troubled by famine, has more recently managed to remain self-sufficient in most food categories except edible oils, and is the world's largest rice exporter. Even during the global health crisis 2020-2022, when the government distributed free food to nearly 800 million people, buffer stocks ran down but not out. Farmers are encouraged to produce more without any consideration of sustainability.

(Source adapted from: https://ig.ft.com/india-population/)

Extract G

Population growth in India

"The greatest obstacle in the path of overall economic development is the alarming rate of population growth," was one Indian government minister's view in 1967. In the 1970s, the Indian government took radical measures to try to prevent population growth, with little success.

Then, in the 1980s and 1990s, India began opening up its economy to the private sector. Policymakers began viewing a growing young population in the form of the so-called demographic dividend – when a majority of a country's population is of working age (15-64 years) – as an engine for further economic development. In May 2023 India took over from China as the country with the highest population reaching 1.4 billion. However, it needs enough well-paying jobs designed to serve the modern, urban economy.

(Source adapted from: https://www.aljazeera.com/features/2023/4/18/overtaking-chinas-population-will-india-gain-or-lose)

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