

VCE Economics Units 3&4

Suggested Solutions

2024 Trial Examination

Section A – Multiple-choice questions

1	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input checked="" type="checkbox"/> D
2	<input type="checkbox"/> A	<input type="checkbox"/> B	<input checked="" type="checkbox"/> C	<input type="checkbox"/> D
3	<input type="checkbox"/> A	<input type="checkbox"/> B	<input checked="" type="checkbox"/> C	<input type="checkbox"/> D
4	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input checked="" type="checkbox"/> D
5	<input type="checkbox"/> A	<input checked="" type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
6	<input type="checkbox"/> A	<input checked="" type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
7	<input type="checkbox"/> A	<input checked="" type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
8	<input type="checkbox"/> A	<input type="checkbox"/> B	<input checked="" type="checkbox"/> C	<input type="checkbox"/> D
9	<input checked="" type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
10	<input type="checkbox"/> A	<input type="checkbox"/> B	<input checked="" type="checkbox"/> C	<input type="checkbox"/> D
11	<input type="checkbox"/> A	<input type="checkbox"/> B	<input checked="" type="checkbox"/> C	<input type="checkbox"/> D
12	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input checked="" type="checkbox"/> D
13	<input type="checkbox"/> A	<input checked="" type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
14	<input checked="" type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
15	<input type="checkbox"/> A	<input checked="" type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D

Question 1 D

D is correct and **C** is incorrect. When the price of a good increases, producers allocate more resources to the production of that good in order to achieve a greater profit.

A is incorrect. The law of demand states that when the price of a good increases, the quantity of the good demanded by consumers decreases.

B is incorrect. The law of supply states that when the price of a good increases, suppliers increase the quantity of the good supplied.

Question 2 C

C is correct.

$$\begin{aligned}\text{average annual inflation} &= \frac{1.8 + 3.0 + 4.2 + 2.7}{4} \\ &= 2.925\end{aligned}$$

Therefore, the average annual inflation rate is approximately 3%.

A is incorrect. This conclusion cannot be made as a year is not specified.

B is incorrect. The Australian Government's inflation target range is 2–3%; therefore, the year 4 CPI does fall within this range.

D is incorrect. The rate of inflation decreased from year 3 to year 4.

Question 3 C

C is correct. Fish in the ocean are a common access resource as all individuals are allowed to catch them and the fish are not owned by any individual or organisation.

A is incorrect. Common access resources are not owned by any individual or organisation.

B is incorrect. There are government regulations in place to prevent overfishing.

D is incorrect. Common access resources have no market price as they are natural resources.

Question 4 D

D is correct. A debit records funds leaving Australia. Net secondary incomes are transactions that involve the transfer of funds in one direction with no future obligations.

A and **C** are incorrect. A credit represents an inflow of money to Australia. Providing foreign aid is an outflow of money from Australia.

B is incorrect. Net primary incomes are payments of income on foreign-owned assets such as profits, dividends and rent.

Question 5 B

B is correct. The participation rate is calculated by dividing the labour force by the working-age population. There is a direct relationship between the number of employed individuals and the participation rate. An increase in the rate of growth of employment would lead directly to an increase in the participation rate.

A is incorrect. Even though the unemployment rate has a direct impact on the participation rate, some individuals who are unemployed may be discouraged job seekers who are excluded from unemployment statistics and are not in the labour force. Therefore, an increase in the unemployment rate would lead to a decrease in the participation rate.

C is incorrect. Government taxes do not have a direct impact on the participation rate.

D is incorrect. Raising the minimum school-leaving age would decrease the number of individuals in the working-age population, which, in turn, would decrease the participation rate.

Question 6 B

B is correct. Free trade is a trade policy that does not restrict imports or exports; it does not have any focus on environmental protection.

A is incorrect. Governments provide subsidies to industries that have positive externalities. For example, in Victoria, compulsory education for children aged 6–17 years may lead to more individuals being educated about environmental issues due to the inclusion of environmental issues as key knowledge in study designs for various subjects.

C is incorrect. Governments tax industries that have negative externalities. For example, excise taxes on cigarettes and alcohol, which can lead to a reduction of litter.

D is incorrect. Governments regulate economic agents to behave in certain ways through laws that can ban certain production or consumption activities. For example, banning single-use plastic bags may lead to a reduction of litter and landfill.

Question 7 B

When the price of exports relative to imports increases, the terms of trade also increase, which is favourable. This causes the demand for the Australian dollar to increase because more dollars are required to purchase Australian commodities, resulting in an appreciation of the Australian dollar.

Question 8 C

C is correct. Quantitative easing is considered an unconventional monetary policy because it involves central banks expanding their balance sheets through large-scale purchases of government bonds or other assets, typically longer-term securities, from the open market.

A, B and D are incorrect. These options are examples of conventional monetary policies that the Reserve Bank of Australia (RBA) implements to manipulate the cash rate.

Question 9 A

A is correct. When the RBA increases the cash rate, interest rates offered by Australian financial institutions are also likely to increase. Higher interest rates attract foreign investors, increasing demand for the Australian dollar and thus driving up the exchange rate.

B is incorrect. Higher interest rates cause the Australian dollar to appreciate, leading exports to become more expensive, which in turn reduces demand for exports and thus decreases the terms of trade.

C is incorrect. Higher interest rates cause the Australian dollar to appreciate, which leads to an increase in the trade weighted index.

D is incorrect. Higher interest rates means that loan repayments become more expensive. Therefore, there would be a decrease in the number of loans taken out by foreign entities.

Question 10 C

C is correct. The percentage of income affects the price elasticity of demand, not supply.

A, B and D are incorrect. These options affect the price elasticity of supply because they reduce the ability of producers to respond to demand.

Question 11 C

C is correct. The budget implementation lag may be long because budget bills must pass through both houses of parliament. This is not a strength because there is a significant delay between the time a problem is identified and the time the implemented policy solution affects the economy.

A, B and D are incorrect. These options are strengths of budgetary policy because targeting particular sectors of the economy leads to more effective policies and better outcomes, a short impact lag has a greater ability to stimulate growth quickly, and targeting a greater range of economic goals makes budgetary policy more dynamic to the needs of the economy.

Question 12 D

D is correct. The income effect refers to how demand for a good changes as a result of changes in consumer income. Higher earnings means greater purchasing power, which increases consumption and demand.

A is incorrect. Satisfaction is related to the concept of diminishing marginal utility to consume; it is not related to income.

B is incorrect. The perceived value of an item is the amount that consumers are willing to pay for a good or service.

C is incorrect. As the price of a good increases, consumers look towards cheaper alternatives; this is called the substitution effect.

Question 13 B

B is correct. Increasing direct taxes decreases the ability of producers to produce goods and services, thus decreasing aggregate supply.

A, C and D are incorrect. These policies increase the ability of producers to produce goods and services, thus increasing aggregate supply.

Question 14 A

A is correct. During an expansion, Gross Domestic Product (GDP) is relatively low (below 3%) and unemployment is relatively high (above 4.5%).

B is incorrect. During a contraction, both GDP and inflation are relatively high (above 4% and 3%, respectively).

C is incorrect. A peak represents strong rates of economic growth (above 4%).

D is incorrect. A trough represents weak rates of economic growth (close to 0%).

Question 15 B

$$\begin{aligned} \text{unemployment rate} &= \frac{\text{unemployed persons}}{\text{labour force}} \times 100 \\ &= \frac{10\,000}{300\,000} \times 100 \\ &= 3.3\% \end{aligned}$$

Section B

Question 1 (11 marks)

- a. The goal of strong and sustainable economic growth is the highest possible rate of economic growth that can be achieved without causing inflationary, external or environmental pressures. It is measured based on percentage changes in real GDP.

In Australia, there is no universally agreed-upon percentage range of GDP that is considered to be a sustainable rate of economic growth; however, a sustainable rate of economic growth is generally considered to be within the range of 3–3.5% per annum. Based on this understanding and the graph, the goal of strong and sustainable economic growth was not achieved. While GDP growth rate was strong in March 2022 at just below 4%, it decreased to approximately 2% in June 2023, then to 1.8% in December 2023. These figures are below the generally accepted range, indicating that the goal was not achieved.

3 marks

1 mark for defining the goal of strong and sustainable economic growth.

1 mark for explaining the accepted GDP percentage range.

1 mark for referring to the graph and explaining that the goal was not achieved.

- b. *For example:*

From June 2023, the graph shows that GDP growth has been below the target range. One factor that would account for this trend is increasing interest rates, because consumer demand for goods and services is likely to decrease when the cost of borrowing is higher. When interest rates increase, this dampens consumption in the economy because discretionary incomes and the use of credit cards for purchases decline.

As the cash rate – which influences interest rates – increased in Australia from 3.35% in February 2023 to 4.35% in February 2024, mortgage repayments and credit card debts have increased. This has resulted in a decrease in consumers' discretionary incomes, leaving them with less money to spend on goods and services. This ultimately decreases demand and GDP. The graph reflects this, showing a GDP growth of approximately 2% in June 2023, which decreased to approximately 1.8% in December 2023.

2 marks

1 mark for describing the trend.

1 mark for outlining one aggregate demand or aggregate supply factor that would account for the trend.

Note: Other factors include lower disposable incomes; weaker consumer and business confidence; appreciation of the Australian dollar; and weaker growth overseas.

- c. Automatic stabilisers are the cyclical component of the budget. These are changes to the budget that occur without deliberate government intervention; they result from changes in the level of economic activity. Social security indexation increases are an example of an automatic stabiliser.

Discretionary stabilisers are the structural component of the budget. These are deliberate policy decisions that are designed to change receipts or outlays in an effort to influence economic activity. Tax cuts are an example of a discretionary stabiliser.

3 marks

1 mark for defining automatic stabilisers.

1 mark for defining discretionary stabilisers.

1 mark for identifying that social security indexation increases are an automatic stabiliser and tax cuts are a discretionary stabiliser.

- d. To stimulate economic growth and boost aggregate demand, policymakers may choose to implement tax cuts as a discretionary fiscal policy tool. Governments can tailor the size, timing and targeted beneficiaries of tax cuts based on their assessment of the current economic situation and policy objectives. Lower taxes mean that individuals and businesses have more disposable income, which can lead to increased consumption and investment, thereby supporting economic activity and the goal of strong and sustainable economic growth.

Increases in social security payments due to indexation occur automatically without discretionary action by policymakers. This means that government spending on social security automatically adjusts to changes in economic conditions, providing a built-in fiscal stimulus during downturns and helping to smooth consumption patterns over time. These increases help support aggregate demand by maintaining consumer spending levels, which supports overall economic activity and the goal of strong and sustainable economic growth.

3 marks

1 mark for explaining how tax cuts influence the business cycle.

1 mark for explaining how social security indexation increases influence the business cycle.

1 mark for linking tax cuts and social security indexation increases to the goal of strong and sustainable economic growth.

Question 2 (14 marks)

- a. The headline cash balance is the total cash received by the Australian Government minus the total cash paid. On the other hand, the underlying cash balance seeks to exclude the cash flows that are included in the headline cash balance and those that do not directly impact the economy, such as Future Fund earnings. Future Fund earnings are the interest and dividends earned by the Australian Government on the Future Fund and on investments in financial assets, which are the proceeds from the sale of government business enterprises, share purchases or debt repayment by state governments.

3 marks

*1 mark for defining the headline cash balance.**1 mark for defining the underlying cash balance.**1 mark for providing at least one point of distinction.*

- b. The stance of budgetary policy is the Australian Government's overall approach to managing public finances and influencing the economy through budgetary measures.

The stance of budgetary policy can be expansionary or contractionary (*or neutral*). When the Australian Government's budget is in a deficit, then the stance of budgetary policy is expansionary, as more money is being injected into the economy via government expenditure than is being taken out via taxation. The purpose of this stance is to stimulate economic growth. When the Australian Government's budget is in surplus, revenues are greater than expenditure. This means that the stance of budgetary policy is contractionary and aims to dampen economic growth. (*When the budget is balanced, revenue is equal to expenditure. Therefore, the stance of budgetary policy is neutral; it neither stimulates nor dampens economic growth.*)

According to budget papers, the 2024–25 Australian Government budget has an estimated surplus of \$9.3 billion, meaning that the Australian Government is taking more money out of the economy than it is injecting into it. This indicates that the stance of budgetary policy in 2024–25 is contractionary. Therefore, the Australian Government will dampen the economy via the production of goods and services, which will decrease the derived demand for labour resources and put pressure on the unemployment rate to rise.

5 marks

*1 mark for explaining the stance of budgetary policy.**1 mark for explaining the different stances. Note: Responses are only required to refer to the contractionary and expansionary stances.**1 mark for stating that the stance of budgetary policy in 2024–25 is contractionary.**1 mark for providing supporting data.**1 mark for predicting that the contractionary stance will result in a rise in the unemployment rate.*

- c. The role of monetary policy is to manipulate financial variables – mainly interest rates via changes to the cash rate – in order to achieve the goals of the Australian Government and improve living standards. From February 2023 to May 2024, the cash rate increased from 3.35% to 4.35%. It is generally accepted that a cash rate above 3% is contractionary. When monetary policy is contractionary, higher interest rates can decrease levels of discretionary income available to households and businesses that have debts.

The cash-flow channel relates to households and businesses that are repaying existing loans. When the cash rate increases, banks increase their interest rates. This increases loan repayments, which in turn decreases the discretionary incomes of households and businesses. This decrease in discretionary incomes dampens consumption, aggregate demand and production, and leads to a decrease in inflation. Australia's inflation rate decreased from 7.0% in March 2023 to 3.6% in May 2024. This is still above the expected range of 2.0–3.0%, which is the range that is considered to be low and stable; however, it is a significant decrease. Therefore, higher interest rates have dampened consumption spending, which has had a positive impact on achieving the goal of low and stable inflation. In addition, higher interest rates mean decreased purchasing power. This decrease in purchasing power erodes living standards as individuals struggle to afford necessities or maintain their quality of life.

6 marks

1 mark for outlining the role of monetary policy.

1 mark for outlining the current stance of monetary policy.

1 mark for explaining the cash-flow channel.

1 mark for explaining the relationship between the current stance of monetary policy and the cash-flow channel.

1 mark for analysing how the current stance of monetary policy has impacted the achievement of low and stable inflation.

1 mark for analysing how the current stance of monetary policy has impacted living standards.

Question 3 (13 marks)

- a. Aggregate supply policies and aggregate demand policies are two key macroeconomic management approaches that are used to influence the overall performance of an economy.

Aggregate supply policies aim to influence the long-term productive capacity and efficiency of an economy. They concentrate on factors that affect the production capabilities of an economy, such as labour force skills, technology, infrastructure and regulations. Aggregate supply policies primarily affect the potential output level of an economy and may have long-term effects on prices. They typically involve structural reforms, investment in education and training, technological innovation incentives, deregulation and other measures aimed at improving the efficiency and productivity of businesses.

Aggregate demand policies focus on managing the overall demand for goods and services in the short to medium term. They concentrate on factors that affect the level of spending in an economy, such as interest rates, government spending, taxation and consumer confidence. Aggregate demand policies primarily influence real GDP, levels of employment and inflation, depending on the state of the economy. Aggregate demand policies involve budgetary policy (government spending and taxation) and monetary policy (control over money supply and interest rates) as primary tools to influence consumption, investment, government spending and net exports.

3 marks

1 mark for defining aggregate supply policies.

1 mark for defining aggregate demand policies.

1 mark for providing at least one point of distinction.

b. For example:

Aggregate supply policies impact productive capacity by improving efficiency, which leads to increased output of goods and services. This, in turn, contributes to higher living standards by supporting economic growth, raising incomes, and improving access to affordable goods and services.

For example, when a government invests in an infrastructure project to build new roads, this investment may improve transportation networks, which can enhance the efficiency of businesses by reducing transportation bottlenecks and transit times; reduce transportation costs; and facilitate the movement of goods and people. These improvements therefore enable businesses to deliver goods and services more quickly and at lower costs, leading to increased productivity. Overall, investment in infrastructure enhances an economy's ability to produce goods and services efficiently, thus expanding its productive capacity.

Improved infrastructure leads to cost savings for businesses, which can translate into lower prices for consumers. For example, reduced transportation costs for businesses may result in cheaper goods and services for consumers. Improved infrastructure can also create job opportunities directly – through construction projects – and indirectly – through increased economic activity generated by better transportation networks. It can also attract more businesses to areas that were previously difficult to access, fostering economic growth and providing local residents with more employment opportunities. Additionally, access to essential services such as healthcare and education is improved, enhancing quality of life. Overall, investment in infrastructure contributes to higher living standards.

4 marks

1 mark for explaining how aggregate supply policies impact productive capacity

1 mark for using an example to support the explanation.

1 mark for explaining how aggregate supply policies impact living standards.

1 mark for using an example to support the explanation.

Note: Other acceptable aggregate supply policies include training and education; research and development; subsidies; tax reform; skilled immigration; trade liberalisation; and environmental policy.

c. *For example:*

Aggregate demand policies aim to stimulate spending in an economy. This can lead to inflation if the economy is operating near its productive capacity. Aggregate supply policies aim to increase the economy's productive capacity. An increase in aggregate supply allows the economy to produce more goods and services to meet the higher demand stimulated by aggregate demand policies, without causing prices to rise significantly.

Aggregate supply policies that promote investment in infrastructure and training and education can lead to more efficient production processes, allowing businesses to produce more at lower costs. This translates to economic growth without inflation.

Improved infrastructure reduces transportation bottlenecks so that businesses can produce and deliver goods and services more quickly and at lower costs, leading to higher potential output and a more efficient economy. This causes the aggregate supply curve to shift to the right, enabling the economy to meet higher demand without significant price increases.

By investing in education and training, the economy benefits from a more skilled workforce, which allows businesses to improve production processes and, ultimately, produce more goods and services for the same level of input. This causes the aggregate supply curve to shift to the right without inflationary pressures.

Overall, by combining aggregate demand policies with aggregate supply policies, governments can achieve a sustainable path to economic growth with minimal inflationary pressures.

6 marks

1 mark for outlining aggregate demand and aggregate supply policies.

1 mark for outlining how aggregate supply policies complement aggregate demand policies to promote non-inflationary economic growth.

1 mark for identifying one aggregate supply policy.

1 mark for explaining how the identified aggregate supply policy promotes non-inflationary economic growth.

1 mark for identifying a second aggregate supply policy.

1 mark for explaining how the identified aggregate supply policy promotes non-inflationary economic growth.

Note: Other acceptable aggregate supply policies include research and development; subsidies; tax reform; skilled immigration; trade liberalisation; and environmental policy.

Question 4 (10 marks)**a.** *For example:*

The current account balance increased from approximately \$10 billion in March 2023 to approximately \$11.2 billion by December 2023. This increase can be attributed to rising commodity prices, particularly for iron ore and coal.

2 marks

1 mark for describing the trend in the current account balance during 2023.

1 mark for identifying one factor that would explain the trend.

Note: Other acceptable factors include strong export performance, a weaker Australian dollar, reduced imports due to supply chain disruptions and improved terms of trade.

- b.** A stronger current account typically puts upward pressure on the value of the Australian dollar. The surplus in the current account balance during 2023 means that Australia was exporting more goods and services than it was importing, resulting in net inflows of foreign currency into Australia. With a current account balance in surplus, foreign entities need to purchase Australian dollars to pay for Australian exports. This increased demand for the Australian dollar relative to other currencies appreciates its value on the foreign exchange market.

The current account balance surplus also contributes to an increase in aggregate demand because exports represent a component of aggregate demand (GDP) while imports are subtracted from it. The higher demand for domestically produced goods and services will stimulate economic growth by encouraging increased production and investment.

4 marks

1 mark for stating that a stronger current account has a positive impact on the value of the Australian dollar.

1 mark for explaining how a stronger current account appreciates the Australian dollar.

1 mark for stating that a stronger current account has a positive impact on economic growth.

1 mark for explaining how a stronger current account increases economic growth.

- c. The current account balance reflects the difference between a country's total exports and total imports of goods and services, and its net income from abroad and net transfers.
- Structural influences are long-term, fundamental characteristics of an economy that affect the current account balance over time. The gap between domestic savings and investment levels affects the current account balance. A country with high domestic savings relative to its investment levels tends to have a surplus in its current account balance, as it has excess savings available for investment abroad. Structural influences such as low savings rates, high spending and an uncompetitive export sector can lead to a current account deficit. This happens when a country needs to import (borrow) capital to finance spending or investment gaps.

Cyclical influences are short-term fluctuations in economic activity that affect the current account balance. Economic booms and recessions impact the current account balance through changes in domestic demand, employment levels, investment and income. During economic booms, increased domestic demand may lead to increased imports and a widening current account deficit. During economic recessions, imports decrease, resulting in a current account surplus.

4 marks

1 mark for describing structural influences.

1 mark for explaining how structural influences affect the current account balance.

1 mark for describing cyclical influences.

1 mark for explaining how cyclical influences affect the current account balance.

Question 5 (17 marks)

- a. *For example:*

The perception of health risks linked to tobacco and benefits associated with vapes is a significant factor in the increased demand for e-cigarettes and vapes. Many people perceive e-cigarettes and vapes to be safer alternatives to smoking traditional cigarettes due to the belief that they contain fewer harmful chemicals and thus reduce exposure to carcinogens. This perception of reduced harm encourages individuals, particularly those who smoke cigarettes and want to quit, to switch to e-cigarettes or vapes, thus increasing demand.

Additionally, social influences, such as peer pressure, have contributed to the adoption and normalisation of vaping. The portrayal of vaping in popular culture, including in movies, television shows and on social media, influences perceptions and behaviours, particularly among young adults. The prevalence of vaping in peer groups may further reinforce the acceptance and adoption of vaping as a social activity or recreational behaviour, thus leading to an increase in demand for e-cigarettes and vapes.

4 marks

1 mark for identifying one non-price factor.

1 mark for explaining how the non-price factor has increased demand for vapes.

1 mark for identifying a second non-price factor.

1 mark for explaining how the second non-price factor has increased demand for vapes.

Note: Other acceptable non-price factors include changes in disposable income, interest rates and the prices of substitute and complementary goods.

b. For example:

One type of market failure associated with vaping is negative externalities in consumption, particularly in the form of second-hand exposure to e-cigarette vapour and its potential negative health effects. As e-cigarette vapour contains harmful substances, it can adversely affect the health of non-users who are exposed to it when it is emitted into the surrounding environment. This second-hand vapour exposure may pose risks similar to those associated with second-hand exposure to smoke from tobacco, including respiratory problems.

The cost of these negative externalities is not fully borne by the producers or consumers of vapes, but is instead passed on to society in the form of increased healthcare costs, reduced productivity and diminished quality of life.

3 marks

1 mark for identifying one type of market failure.

1 mark for outlining the market failure in relation to the e-cigarette and vape market.

1 mark for outlining the impact of the identified market failure.

c. For example:

The negative externalities associated with vaping could be addressed by government interventions aimed at internalising the external costs associated with vaping.

The Australian Government could implement regulations on the production, sale and marketing of vaping products. This would involve ingredient disclosure requirements, restrictions on flavourings and additives that may appeal to young people, and restrictions on the import and sale of single-use vapes. These regulations would decrease the demand for vapes, which would subsequently reduce second-hand exposure to harmful vapour emissions. Furthermore, the decrease in demand for vapes would decrease the availability of vapes, thus correcting the market failure.

3 marks

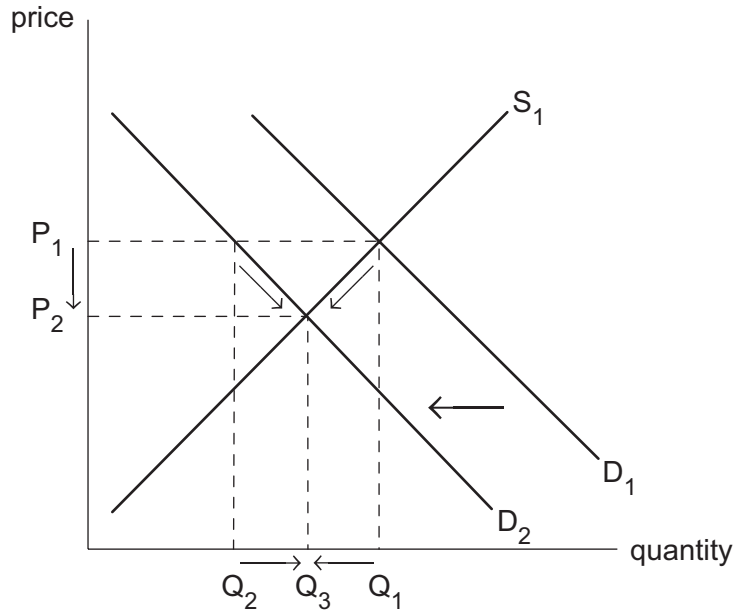
1 mark for identifying one government intervention that could be used to address the market failure identified in part b.

1 mark for explaining the intervention.

1 mark for explaining how the government intervention could correct the market failure.

Note: Other acceptable government interventions include indirect taxation, subsidies, advertising and direct provision. Consequential on answer to Question 5b.

d. For example:



Government regulations on the production, sale and marketing of vaping products may discourage individuals from beginning or continuing to use e-cigarettes and vapes. This will cause aggregate demand to decrease, shifting the aggregate demand curve to the left from D_1 to D_2 , as shown in the graph. This decrease will cause a surplus of goods and services in the economy at P_1 . To eliminate the surplus, there will be a contraction in supply and expansion in demand, which decreases the price (from P_1 to P_2) and quantity (Q_1 to Q_3) until a new equilibrium price and quantity is reached by the market.

4 marks

1 mark for drawing a fully labelled demand and supply graph. Note: The demand curve must show a decrease.

1 mark for showing the impact of the government intervention identified in **part c.** on demand, supply, price and quantity.

1 mark for analysing how the government intervention identified in **part c.** will impact aggregate demand.

1 mark for analysing the how impact on aggregate demand will impact supply, price and quantity.

Note: Consequential on answer to **Question 5c.**

e. *For example:*

An efficient allocation of resources means using land, labour and capital effectively to meet consumer needs and wants while minimising waste. Regulations aimed at vaping products could potentially lead to an improvement in allocative efficiency, particularly in the context of public health concerns. Allocative efficiency refers to the optimal allocation of resources to maximise societal welfare.

Vaping imposes significant costs on the healthcare system due to the treatment of vaping-related illnesses such as lung cancer, heart disease and respiratory ailments. By reducing the prevalence of vaping through regulations, healthcare resources can be redirected towards treating other medical conditions and improving overall public health. Vaping-related illnesses can also result in lost productivity due to absenteeism, disability and premature death. Vaping regulations would lead to productivity gains as both users and non-users of vapes will experience improved health outcomes and be less likely to miss work or require medical leave.

3 marks

*1 mark for identifying one type of economic efficiency that the government intervention identified in **parts c. and d.** could contribute to.*

1 mark for explaining the identified type of economic efficiency.

1 mark for explaining how the identified government intervention would lead to reallocation of resources away from vaping, and thus more efficient allocation of resources.

*Note: Consequential on answers to **Questions 5c. and 5d.***