

VCE ECONOMICS UNIT 3/4

CPAP Practice examination A 2024

SUGGESTED RESPONSES, MARKING SCHEME AND ADVICE

1	Α	В	С	D
2	Α	В	С	D
3	Α	В	С	D
4	Α	В	С	D
5	Α	В	С	D
6	Α	В	С	D
7	Α	В	С	D
8	Α	В	С	D
9	Α	В	С	D
10	Α	В	С	D
11	Α	В	С	D
12	Α	В	С	D
13	Α	В	С	D
14	Α	В	С	D
15	Α	В	С	D

Answers to MC questions

SECTION A

Question 1

Which of the following government interventions is most likely to address market failure in the form of asymmetric information?

- A. indirect taxes
- B. direct provision of goods and services
- C. regulations
- D. subsidies

The key knowledge in the Study Design requires students to understand the role and effect of indirect taxation, subsidies, regulations, advertising and direct provision as forms of government intervention in the market to address market failure and students are required to understand four different types of market failure: public goods, externalities, asymmetric information, and common access resources. Past examination responses reveal that many students find it difficult to connect an appropriate policy solution to market failures, this is particularly the case for market failure in the form of asymmetric information. Students need to appreciate that a policy solution needs to be one that is designed to discourage producers (or consumers in some cases) from leveraging off their superior knowledge about a good or service in a way that undermines efficiency. Accordingly, government regulations that are designed to prohibit trading on the basis of asymmetric information (e.g. laws/regulations relating to misleading and deceptive conduct) are the most direct and appropriate means of addressing this market failure. **This makes option C the best response.** All other policy options are suited to other types of market failures. For example, indirect taxes and subsidies are best for externalities and the direct provision of goods and services best for public goods.

Questions 2 and 3 relate to the table below:

March quarter key figures, percentage changes	
Chain volume GDP and related measures	Mar 23 to Mar 24
GDP	1.1
GDP per capita	-1.3
Real net national disposable income	-0.5
Real unit labour costs	3.4
Terms of trade	-7.3
	-7.3

Source: ABS, Australian National Accounts: National Income, Expenditure and Product March 2024

Question 2

According to the statistics contained in the table, it can be concluded that over the year to end March 2024:

- A. The costs of production have fallen and commodity prices have increased
- B. Growth in real GDP has exceeded population growth and material living standards have increased
- C. The prices paid for imports have fallen and more goods and services have been produced
- D. Economic growth has increased and material living standards have declined

A key skill in the Study Design requires students to explain and interpret trends and patterns in economic data and other information. Students should expect to interpret and make sense of a data set, such as that within the table above, and ensure that they understand the implications stemming from each of the variables. **Option D is the best response** because both implications are accurate. Economic growth has increased as evidenced by the rise in chain volume GDP (i.e. real GDP) by 1.1%, and material living standards has declined as evidenced by the fall in (real) GDP per capita. All other options, A-C, include at least one implication that is inaccurate. With respect to option A, it is likely that the costs of production have increased as evidenced by the decline in the terms of trade by 7.3%. With respect to option B, growth in real GDP is actually below population growth (hence the decline in real GDP per capita) and material living standards have fallen. With respect to option C, the change in the price paid for imports cannot be determined (but the lower TOT would suggest that they have increased).

Question 3

In the event that these statistics are replicated in the remaining quarters of 2024, the likely policy responses are:

- A. A more expansionary monetary policy stance and the delivery of a larger structural budget deficit
- B. A less restrictive monetary policy stance and the delivery of a larger structural budget deficit
- C. A less restrictive monetary policy stance and the delivery of a smaller structural budget deficit
- D. A more expansionary monetary policy stance and the delivery of a smaller structural budget deficit

A key skill in the Study Design requires students to use economic data and information from a wide range of sources to analyse economic issues and form conclusions. **Option B is the best response because** the data from the table provides evidence of an economy that is growing too slowly (1.1% growth in real GDP), with the likelihood that inflation will decline over time in the face of reduced incomes (lower TOT and national disposable income), as well as the slow growth in AD and demand inflationary pressures (despite cost inflationary pressures emanating from higher RULCs). In this economic environment, the federal government is more likely to deliver a more expansionary budgetary policy stance via the delivery of a larger structural budget deficit. In addition, the RBA is likely to become less focused on inflation (given that inflation is likely to decline from its relatively high level) and deliver a less restrictive stance. Option A is incorrect because the current stance of monetary policy (as at July 2024) is restrictive and a loosening of policy to stimulate the economy will be 'less restrictive' (not more expansionary). Option C is incorrect because the government is likely to deliver a larger structural deficit. Option D is incorrect because both options are not likely (as explained above).

Question 4

Consider the following hypothetical data relating to the Consumer Price Index (CPI).

Quarter	СРІ
Dec 2021	100.0
Mar 2022	100.5
June 2022	102.0
Sep 2022	104.0
Dec 2022	106.0
Mar 2023	111.0
June 2023	111.5
Sep 2023	113.5
Dec 2023	116.1
Mar 2024	115.8
June 2024	115.2

The inflation rate for the year to end December quarter 2023 is:

A. 9.5%

- B. 2.3%
- C. 6.0%
- D. 3.3%

A key skill in the current Study Design is the requirement for students to 'calculate relevant economic indicators using real or hypothetical data' and this skill has been tested in Section A of every exam over the life of the current and former study designs, including one question from the 2023 exam (Q6 relating to the calculation of the labour force underutilisation rate) and two questions from the 2022 exam (Q5 calculating economic growth and Q9 calculating AD). Given that students typically struggle selecting the right response when making calculations from (hypothetical) statistics, it is reasonable to expect at least one question to appear in Section A of the 2024 examination. For the current question, students first need to determine which two CPI figures are relevant (i.e. Dec Q 2023 and Dec Q 2022) and then perform a calculation (with a calculator) using the CPI inflation formula. **Option A is the correct response** given that the required calculation is 116.1 (CPI Dec 2023) – 106.0 (CPI Dec 2022) / 106.0 (CPI Dec 2022) which becomes 10.1/106 = 9.5%.

Question 5

Which of the following is most likely to represent a change in an 'aggregate supply factor' that reduces productive capacity?

- A. Annual productivity growth falling from 4% to 3%
- B. A decrease in the number of skilled independent visas being granted to migrants from 30,375 places to 16,900 places
- C. A loosening of monetary policy
- D. A fall in the trade weighted index

This question is somewhat similar to Question 5 from the 2023 exam, which was poorly handled, with only 23% of students choosing the correct response. It highlights the importance of understanding the different implications associated with a decline in the 'growth rate' of a variable compared to a decline in the absolute value or level of the variable. In that question, many students did not appreciate that a 'slower rate' of productivity growth still contributes to an increase in aggregate supply because productivity is still increasing (and therefore helping to stimulate AS/productive capacity), albeit at a slower rate. In relation to the current question, it also appears that options A and B will tend to reduce productive capacity. However, productivity is still increasing and skilled migrants are still entering the country, both helping to boost the supply potential of the nation. Option C is also invalid because a loosening of monetary policy means that that the cash rate/interest rates have fallen, which can contribute to an increase in productive capacity to the extent that businesses are motivated by lower debt servicing costs to boost supply. This leaves **option D as the best response** because an exchange rate depreciation (as measured by a fall in the TWI) adds to the costs of production (by virtue of the fact that the bulk of Australia's imports are capital or intermediate goods) and reduces the willingness of businesses to supply in aggregate. [This is notwithstanding the overall increase in AS that would occur in response to the depreciation's stimulus to AD and production – but this effect stems from the demand side and is therefore an AD factor rather than an AS factor.]

Question 6

The repayment of debt by Australian borrowers to foreign lenders is recorded in the balance of payments as:

- A. a credit in the capital and financial account
- B. a debit in the capital and financial account
- C. a credit in the current account
- D. a debit in the current account

Student responses in past examinations reveals that many struggle to accurately categorise or classify international transactions in the balance of payments. This was once again revealed in the 2023 exam, where Question 7 required students to determine where dividend receipts from abroad would be recorded in the balance of payments. Only 47% of students selected the correct response (i.e. credit in the current account). In that question, students needed to appreciate that dividend receipts from overseas are an inflow of funds (credit) that represent the servicing costs for foreigners who have sold shares to Australian investors. These flows are recorded in the current account as a credit. It is only if the receipt of funds was related to the 'sale of the shares' by Australians that it would be recorded in the CAFA. In relation to the current question, **option B is the best response** because the repayment of debt is recorded in the financial account (i.e. or CAFA) as a debit, as funds are leaving Australia (which is distinct from the repayment of interest on that debt - which flows through the current account). Students should always remember that the sale/receipt of shares/debt to/from foreigners represent financial flows that are 'capital' in nature (i.e. imply ongoing obligations) and are therefore recorded in the CAFA. In contrast, the receipt/payment of dividends/interest represents the servicing of the shares/debt which are 'çurrent' in nature (i.e. imply no ongoing obligations).

Question 7 Which of the following is incorrect in relation to Australia's macroeconomic goals and/or living standards?

- A. Full employment requires the unemployment rate to be as low as possible before inflation becomes excessive
- B. Strong and sustainable economic growth requires real GDP to be increasing at a rate that continues to create employment and incomes, without causing excessive pressure on inflation and the environment
- C. Price stability requires that the general price level is reduced by 2-3% per year on average over time
- D. Living standards in material terms should improve when real GDP growth exceeds population growth

The study design requires students to have an understanding of the three major macroeconomic goals of strong and sustainable economic growth, price stability and full employment, as well as an understanding of the government's focus on advancing Australian living standards. **Option C is the best response** because it is the only statement that is incorrect. Price stability does not require deflation to occur in the order of 2 - 3% per year on average over time - which is what the statement implies by a reduction in the general price level. Instead, price stability refers to the goal of achieving 2 - 3% growth in inflation (or the CPI) on average over time.

Question 8

The cost of living relief provided to Australian households during 2024 through the provision of energy rebates is designed to have which of the following effects?

- A. Reduce inflation as energy retailers are provided with an effective government subsidy to reduce energy bills
- B. Reduce inflation as households and businesses spend less on energy and other goods and services
- C. Increase inflation as people have more disposable income and spend more on goods and services
- D. Increase inflation as people have more discretionary income and spend more on goods and services

The 2022 External Examination Report revealed that many students demonstrated gaps in their understanding of the effects of a cut or rise in excise taxes on prices and inflation. This was borne out in responses to Question 1c, which required students to 'explain how one aggregate demand factor and one aggregate supply factor have influenced the inflation rate over the past 12 months'. It was common for students to argue that the (temporary) cut to excise on fuel would be inflationary given that households will have more discretionary income to spend more on other goods and services, thereby increasing demand inflation. However, they ignored the more immediate downward impact on prices and inflation, which was indeed the government's intention when introducing the excise tax relief in March of 2022. In other words, the government was responding to high fuel prices and was keen to provide cost of living relief to households. The same logic applies in relation to the \$300 energy rebates provided to Australian households and small businesses during 2024. The rebates were effectively delivered as a producer subsidy, whereby energy retailers were provided with payments on the proviso that they pass this down to consumers via a reduction in their energy bills. It is for these reasons that **option A is the best response** as it correctly refers to a fall in inflation and provides an accurate rationale. Option B is incorrect because the rationale for the reduction in inflation is inaccurate. Options C and D are incorrect because inflation does not increase.

Question 9

In relation to trade liberalisation, which statement below is inaccurate?

- A. It can be evidenced by new free trade agreements and can cause a fall in unemployment
- B. It can be evidenced by falling tariffs and can cause a rise in unemployment
- C. It can be evidenced by higher tariffs and can cause living standards to improve
- D. It can be evidenced by new free trade agreements as well as lower tariffs and can improve efficiency in the allocation of resources

A key knowledge point in the Study Design requires students to demonstrate an understanding of the short and long term effects of trade liberalisation on Australia's international competitiveness, the allocation of resources, aggregate supply, and the domestic macroeconomic goals and living standards. Student responses to Question 2a from Section B of the 2023 exam revealed that many students were unable to connect the declining rates of tariffs on Australian motor vehicles with trade liberalisation and the resulting impacts on efficiency/living standards in both the short and long term. It is recommended that students are prepared to discuss (or consider) both the short and long run consequences whenever a question refers to trade liberalisation. For the current question, it would be tempting to select either option A or B, given the conflicting effects on unemployment. However, it remains true that trade

liberalisation can both increase unemployment (e.g. in the short term) and decrease unemployment (e.g. in the long term). Accordingly, **option C is the best response** because the statement is inaccurate given that higher tariffs would be evidence of a 'retreat' from trade liberalisation. The statements contained in options A, B and D are indeed accurate statements in relation to trade liberalisation.

Question 10

Assume that a hypothetical economy has the following labour market statistics?

Total population	350 million
Working age population	300 million
Total employed	180 million
Job vacancies	15 million
Unemployed persons	20 million
Underemployed persons	10 million

The participation rate and the underutilisation rate are as follows:

- A. Participation rate is 57% and the underutilisation rate is 5%
- B. Participation rate is 60% and the underutilisation rate is 15%
- C. Participation rate is 57% and the underutilisation rate is 22.5%
- D. Participation rate is 67% and the underutilisation rate is 15%

As noted in the comments provided for Question 4, responses to multiple choice questions over the past few years have highlighted the difficulty students have experienced demonstrating the key skill 'calculate relevant economic indicators

using real or hypothetical data'. This includes the 2023 exam, where only 43% of students were able to accurately calculate the labour force underutilisation rate from the hypothetical data in the adjacent table. The options were A. 10%, B. 13%, C. 15% and **D. 19%.** The total underemployed equals 15m (10m UE + 5m UnderE) and the labour force is 80m (10m UE + 70m E). The underutilisation rate equals [15m/80m] × 100 = 18.75% which is approximately 19%. The majority of students (46%) chose option C and

unemployed persons	10 million
underemployed persons	5 million
employed persons	70 million
Total population	100 million

therefore made the mistake of using the wrong variable in the denominator of the equation. In other words, they used the total population of 100 as the denominator instead of the labour force of 80. It is advisable for students to annotate their examination paper by including the relevant formula required (e.g. the UE rate as UE/UE+Empl; the PR as Empl+UE/working age pop, etc.). The current question has the added difficulty of requiring students to calculate both the participation rate and the labour force underutilisation rate. **Option D is the best response**, because the PR is 67%, calculated by dividing the size of the labour force (employed 180 + unemployed 20 = 200) by the working age population of 300, and the underutilisation rate is the total number of unemployed (20) + underemployed (10) as a proportion of the labour force (180+20). Which is [(30)/(200)*100] and becomes [15/100*100] = 15%.

Question 11

An improvement in efficiency can sometimes be demonstrated by a movement along the production possibility frontier (PPF). Which combination of efficiency types below is most likely to be associated with a movement along the PPF.

A. Allocative and intertemporal

- B. Allocative and productive
- C. Productive and intertemporal
- D. Dynamic and productive

The study design requires students to demonstrate an understanding of the meaning and significance of economic efficiency, including allocative efficiency, productive efficiency, dynamic efficiency and intertemporal efficiency and their relationship to the PPF model. Students should appreciate that, with the exception of productive efficiency, an improvement in each type of efficiency can be demonstrated via a movement along the PPF curve. This means that **option A is the best response** because an improvement in allocative efficiency can be demonstrated by moving along the PPF, for example, away from the production of harmful goods and towards the production of less harmful goods. Similarly, an improvement in intertemporal efficiency can be demonstrated by moving away from the production of

goods/services that damage the environment and towards the production of goods/services that are less damaging or more sustainable.

Question 12

Which of the following is not consistent with a free and perfectly competitive market?

- A. An absence of government regulations
- B. Restrictions on the entry of firms into a market
- C. Product homogeneity
- D. Many buyers and sellers

The study design requires students to understand the conditions that need to exist for a free and perfectly competitive market. These conditions include a large number of buyers and sellers, homogenous products, freedom of entry into the market and exit out of the market, perfect information and perfect resource mobility. Options A, C and D reflect conditions that indeed consistent with free and competitive markets. **Option B is the best response** because a perfectly competitive market requires no restrictions on the entry of firms into that market.

Question 13

In relation to cyclical unemployment and structural unemployment:

- A. Cyclical unemployment will be highest during the boom phase of the economic cycle and is best targeted by an increase in the target cash rate
- B. Structural unemployment will usually decrease following tariff reductions and is best targeted by a reduction in personal income tax rates
- C. Cyclical unemployment will be highest during the downturn phase of the economic cycle and is best targeted by a loosening of monetary policy
- D. Structural unemployment will usually increase following a rise in tariffs and is best targeted by budgetary policy supply side initiatives

The study design requires students to demonstrate an understanding of the difference between cyclical and structural unemployment. In addition, students need to be aware of the most appropriate policy solutions to address each type of unemployment. **Option C is the best response** because cyclical unemployment is closely related to the economic/business cycle and will be at its highest during a period of economic contraction (i.e. the downturn phase of the cycle) and it is best targeted via the use of a monetary policy loosening (i.e. a decrease in the target cash rate) designed to stimulate AD/GDP and the demand for labour. Option A is incorrect because cyclical unemployment will be lowest during the boom phase of the cycle and is targeted by a reduction (not increase) in the target cash rate. Option B is incorrect because tariff reductions (or trade liberalisation more generally) will usually cause an increase (not decrease) in structural unemployment following a period of economic restructuring/displacement of workers in those industries struggling to compete against cheaper imports. In addition, lower income tax rates are generally more suited to reducing cyclical unemployment. Option D is incorrect because it refers to a rise in tariffs which helps to protect employment (in the short term at least) and therefore not result in an increase in structural unemployment.

Question 14

With respect to headline and underlying inflation, which of the following statements is incorrect?

- A. The underlying rate of inflation will be above the headline rate when there is a decrease in the price of volatile items such as petrol
- B. The headline rate of inflation will be above the underlying rate following supply shocks to the economy (e.g. a natural disaster)
- C. The underlying rate can be measured by the RBA's weighted median which is the average of all price changes in the CPI
- D. The underlying rate can be measured by the RBA's trimmed mean where the middle 70% of price changes recorded in the CPI are considered whereas the headline rate includes all price changes

The Study design requires students to demonstrate an understanding of the measurement of the inflation rate using the CPI, including the difference between the headline and underlying (core) rate of inflation. Student responses in

past examinations reveal that confusion persists in relation to the difference between the headline and underlying rates of inflation. This was borne out in Question 1d of the 2023 examination, where students were required to explain one reason why the underlying rate of inflation may differ from the headline rate inflation. Only 42% of students were able to achieve the full 2 marks for this question. As noted in the Examination report, it was expected that students would refer to either the role of volatile prices (such as petrol and fruit and vegetables) in accounting for differences, or the RBA's practice of extracting the top 15% and bottom 15% of price changes when calculating its underlying (trimmed mean) measure. However, a number of students erred by referring to the difference between the headline and underlying budget balances, and many were confused about the types of goods or services that are removed from the CPI in order to arrive at the underlying rate. For example, some students referred to prices of seasonal goods being removed, or 'outliers' being removed, and others referred to the removal of price changes stemming from the supply side of the economy rather than the demand side. In relation to the current question, the statements contained in options A, B and D are indeed accurate statements. **Option C is the best response** because the explanation/definition of the weighted median is inaccurate: The RBA's weighted median is not an average of all prices in the CPI, but rather a measure of the price change of the good or service in the middle of distribution of price changes within the CPI (i.e. the price change of the item at the 50th percentile of price changes).

Question 15

During a period of lower interest rates, the asset prices and wealth channel primarily helps to stimulate aggregate demand and create jobs by increasing

- A. consumption demand as the value of properties rise and homeowner wealth increases
- B. consumer confidence which leads to a rise in consumption and aggregate demand
- C. investment in houses which encourages house construction
- D. consumption and investment as the cost to service existing loans will decrease

The study design requires students to demonstrate an understanding of four key transmission channels of monetary policy, one of which is the asset prices and wealth channel. This is perhaps the channel that is misunderstood the most, as evidenced by responses to Question 4d from the 2023 exam. Students were required to refer to the asset prices and wealth channel and explain why the fall in house prices might have a negative effect on AD and the achievement of full employment. The average score was only 45%, with many students failing to make reference to higher interest rates/tighter monetary policy. In addition, many students also attempted to explain the channel via the decrease in the construction of houses. For example, that lower house prices discourage further investment in houses therefore decreases AD via a reduction in housing construction. This approach was too micro focused, instead students were required to explore the link via the reduction in AD (e.g. consumption demand) occurring as a consequence of homeowners/mortgagees feeling less wealthy and less inclined to spend money on goods and services. Other students erred by focusing solely on the role of consumer confidence, which should be avoided as it is not included as a key transmission channel. For the current question, option A is the best response because lower interest rates will tend to increase the demand for properties, which in turn increases the value of household assets (or increase the equity people have in their homes), which incentivises consumption spending (and stimulates AD and the demand for labour). Option B and C are incorrect for the reasons mentioned above. Option D is incorrect because this refers to the cash flow transmission channel.

SECTION B

Question 1 (6 marks)

Identify the 'three basic economic questions' faced by an economy and describe how <u>two</u> of these questions are answered in the Australian economy.

6 marks

- 2 marks for identifying all three basic economic questions
- 2 marks for an accurate description of one of the basic questions
- 2 marks for an accurate description of another of the basic questions

Advice: This is a variant of the VCAA Sample Exam available on the VCAA's website. The original Sample Exam question is as follows: Explain how Australia's market economy answers the three basic economic questions (6 marks). For the current question, students are required to identify all three questions, but only unpack the significance of two of these questions in relation to the Australian economy. For these types of questions, where students are asked to write about a set number of reasons/factors/explanations, etc., it is common for students to waste time and write more than is required. Examiners are typically instructed to ignore the third description when two are asked for, or the second description when one is asked for.

Sample answer: The three basic economic questions are: 1. what (and how much) goods and services to produce, 2. how to produce these goods and services and 3. for whom these goods and services are produced. The Australian economy answers these three questions via a combination of the 'invisible hand' (i.e. the forces of demand and supply) as well as government decision making. Australia's market economy is one that primarily driven by market forces, but with some government intervention that is ultimately designed to take account of market imperfections (e.g. market failures) that inhibit the achievement of economic efficiency.

With respect to what and how much to produce, it is mainly the demands of consumers, combined with the ability of producers to meet this demand, that determines what goods and services will be produced and in what quantities. However, the government does play a role via its determination to manipulate the market such that it accounts for market failures and/or ensure that certain goods and services are provided in the economy. For example, the government provides defence services that otherwise would not be produced in a market, and levies indirect taxes on the production of some products with negative externalities in consumption or production, such as tobacco.

With respect to how to produce, again the market will ultimately decide the answer to this question, with producers' being heavily influenced by the relative prices of the various factors of production (including labour and capital). For example, lower prices of technology or capital will encourage producers to substitute away from labour and into capital. The government also plays a role, not only as a producer itself, but also via various laws and regulations that influence the relative cost of factors of production (e.g. the various laws designed to protect labour that raise the relative of labour and encourage greater use of capital).

[In Australia, the answer to the 'for whom question is largely' determined by who can afford to buy what is produced, which is mostly determined by markets once again to the extent that incomes are determined mostly by a person's economic contribution to the production process (e.g. the wages one receives from employment or from entrepreneurial activity). However, the government does play an important role via its determination to achieve a more equitable distribution of income (e.g. via taxes and transfer payments).]

Note: Square bracketed section is not required for full marks.

Question 2 (22 marks)

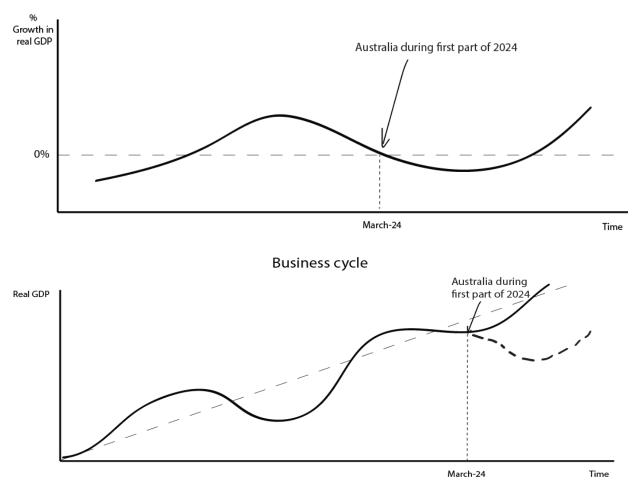
a. Making reference to a relevant economic statistic/indicator, describe the stage of the business cycle that Australia is likely to be in during 2024. Use a business cycle diagram in the space below to support your description.

5 marks

- 1 mark for use of an accurate statistic/indicator (e.g. very low real GDP growth)
- 1 mark for identification of the stage of the business cycle
- 1 mark for accurate labelling of both the Y&X axes
- 1 mark for accurate/appropriate inclusion of the cyclical growth line
- 1 mark for appropriate use of/reference to the diagram

Note 1: Students are not expected to recall the exact percentage growth in real GDP (e.g. 0.1% for the March quarter 2024 or 1.1% for the year to end March 2024). It would be sufficient to refer to a very low rate of growth in real GDP or one that is close to 0 (on a quarterly or annualised basis).

Note 2: Students are free to use either version of the business cycle diagrams as presented below.



Business cycle

Advice 1: The current Study Design requires students to be aware of the causes of the business cycle. Accordingly, students should be prepared to answer questions that test their understanding of what might cause the economy to enter the boom phase of the cycle (e.g. excessive business and consumer confidence) or the downturn phase of the cycle (e.g. overinflated prices, including the price of money - the interest rate). Reference to the business cycle has been made in Section B of the exam in 2019, 2020, 2021, and 2023, with Part A of the 2022 exam (Q12) focusing on the business cycle. While the 2021 reference was relatively straightforward (as the focus was on automatic versus discretionary stabilisers), the 2019 and 2020 versions were a little more demanding. In the 2020 exam, Q2b (5 marks) students were required to explain the role of automatic stabilisers in influencing aggregate demand and stabilising the business cycle in 2020 and in the 2019 exam, questions 2a, 2b and 2c required students to demonstrate an

understanding of the meaning of 'business cycle', as well as the causes and effects. Common mistakes included: confusing the business cycle with a 'product life-cycle'; adopting too much of a micro focus (e.g. focusing on the drop in production for a particular 'product' when attempting to describe the business cycle contraction) when a macro focus was required; and generally not being able to identify a factor contributing to a business cycle contraction.

Advice 2: The current question is similar to the question asked on the 2023 examination, but without the requirement to support the description via the use of a relevant diagram. In that question, students were required to refer to at least one economic indicator when identifying the stage of the business cycle for the Australian economy <u>since July</u> 2023. It highlights that students need to remain engaged with the key indicators or statistics in the economy right up until the examination. Fewer than 50% of students achieved full marks, with many making very avoidable errors such referring to statistics that did not support their contention and/or confusing the contractionary phase of the economic cycle with a contractionary monetary and/or budgetary policy stance.

Advice 3: The key skills in the Study Design requires students to construct, interpret and apply economic models such as the business cycle. This specific key skill has not been tested on recent exams and students should be prepared for one in 2024 (or future years). It is important to correctly label the Y and X axes, paying particular attention to the Y axis as its label will depend on the type of business cycle diagram being drawn.

Sample answer: Australia is likely to be in the downturn [contractionary] phase of the business cycle given that the rate of growth in real GDP has continued to fall, to as low as 0.1% for the March quarter of 2024 [which is a very low annualised rate of 0.4% and follows growth of only 0.3% for the December quarter of 2023]. This can be illustrated via the use of a business cycle diagram, with the very low rate of economic growth that follows a period of economic recovery (post the Covid recession) and potentially precedes a period of negative growth [or perhaps even a recession].

Note 3: Student responses are likely to leverage off the more recent June quarter figures for GDP (released in September 2024) which were not available at the time of writing the sample response above.

Note 4: Square bracketed section is not required for full marks.

b. Explain how the recent increase in government spending on JobSeeker allowance (unemployment benefits) helps to increase aggregate demand (AD) and assist with economic recovery.

3 marks

- 1 mark for linking the increase in JobSeeker allowance to an increase in Consumption demand
- 1 mark for describing the link between JobSeeker allowance and AD
- 1 mark for establishing a link to economic recovery (via growth in real GDP/output/production)

Advice: Multiple choice question No. 3 from the 2023 exam once again revealed the problem that students continue to have in relation to the way that transfer payments influence AD. In that question, students were required to determine which of the four examples of public sector expenditure would be classified as government current expenditure (when calculating AD). Only 40% of students were able to select the correct response (option B: wages of public servants/police force salaries), with 33% of students incorrectly choosing option A, which referred to unemployment benefits. Students should always remember that income support payments paid by the government, or transfer payments more generally, will only influence AD once the money is spent by the recipient of the transfer payment/income support. In which case, it influences AD via the stimulus to Consumption demand.

Sample answer: This increase in transfer payments in the form of income support for unemployed persons leads to an increase in household disposable income, which in turn increases spending on goods and services. This will be reflected by a rise in Consumption demand [which makes up approximately 60% of AD] and an increase in AD. The growth in AD will then result in a rise in the production of goods of services (i.e. real GDP) to meet this additional demand. This in turn helps to lift the rate of economic growth above the relatively low rate currently being experienced in the economy [i.e. an annualised growth rate of 0.4%], which therefore helps the economy to rebound from the current contraction/downturn faster than otherwise.

Note: Square bracketed section is not required for full marks.

c. Describe how the appreciation of Australia's exchange rate between February and July of 2024 is likely to influence Australia's position on the business cycle.

3 marks

- 1 mark for accurate identification of the stage of the business cycle (e.g. Australia moving further into the current contractionary/downturn phase)
- 2 marks for an explanation of the link between the appreciation and a lower rate of growth in real GDP (economic growth)

Note: There is no requirement to explore the supply side effects of the appreciation in order to achieve full marks. [The supply side effects should be explored in the next question.] However, some students might refer to the beneficial supply side effects of the appreciation (via the impact on the costs of production) working to partially offset the negative demand side effects. These students can be rewarded to the extent that their overall description is deficient in some other respects.

Advice 1: As noted in the advice provided for Part a, students should be prepared for questions that test their understanding of what might cause our economy to move through different stages of the business cycle, which is the same as asking what might cause Australia's position on the business cycle to change. The easiest way to respond to these types of questions is to think about the factors that can influence economic growth (e.g. exchange rate movements, interest rate changes, movements in the terms of trade, etc.) and make a link back to a position on the business cycle. In short, the current question requires students to unpack the relationship between an exchange rate appreciation and economic growth, with the added reference to the relevant stage(s) of the business cycle.

Advice 2: Questions relating to causes and/or effects of changes in the exchange rate appear regularly on exams given that changes in the exchange rate are topical and feature heavily in the press every year. This included the 2023 exam, where questions were asked about both the causes (Q2b) and the effects (Q2c) of a change in the exchange rate. Importantly, when responding to exchange rate questions, students should be careful not to confuse cause and effect – which is relatively common. On occasions, assessors will read responses that are brilliant in terms of the ability of the student to connect key economic variables but are awarded zero marks because the student confused cause and effect. In the context of the current question, students should not attempt to explain how a change in economic growth/movement on the business cycle causes the exchange rate to appreciate.

Advice 3: When attempting to respond to questions relating to the causes/effects of a change in the exchange rate, students should also remember to focus on the 'right variables'. For example, in the 2023 exam, when attempting to explain a cause of the exchange rate depreciation (Q2b), many students accurately focused on the fall in the terms of trade/commodity prices. However, when responding to part c (i.e. the effects), they focused on the (negative) impacts of a declining terms of trade rather than the (positive) effects of a depreciation. It therefore resulted in them arguing that an exchange rate depreciation had a negative impact on both aggregate demand and economic growth - when the reverse is true.

Sample answer: The appreciation of the exchange rate is likely to reduce the rate of economic growth and cause Australia to move further into the current contractionary/downturn phase of the business cycle. This is because the appreciation reduces the price competitiveness of Australia's tradeables sector, which ultimately reduces the demand for exports, increases the demand for imports, further reduces the net exports component of aggregate demand and reduces the rate of growth in real GDP/economic growth.

d. Explain how the recent appreciation of the exchange rate assists with the achievement of one of the RBA's macroeconomic goals.

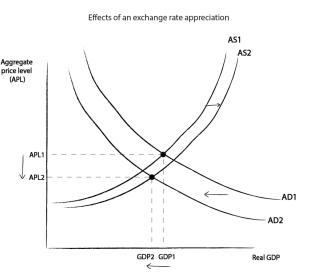
5 marks

- 1 mark for demonstrating an understanding of a relevant macroeconomic goal of the RBA
- 2 marks for an accurate and detailed explanation of the link between the appreciation and the relevant goal that emanates from the (aggregate) demand side
- 2 marks for an accurate and detailed explanation of the link between the appreciation and the relevant goal that emanates from the (aggregate) supply side

Advice 1: The updated Statement on the Conduct of Monetary Policy (released in December 2023) now highlights the dual focus being given to the achievement of price stability <u>and</u> full employment. So, while the RBA's overriding objective remains to increase the economic prosperity and welfare for all Australians, it believes that this is best achieved via the joint focus on price stability and full employment. Accordingly, when selecting a macroeconomic goal

in the context of this question, students should initially be thinking about one of these two goals. However, the framing of the question effectively constrains students to focus on price stability because it is the only goal of the two that is actually supported by an exchange rate appreciation.

Advice 2: An effective way to deal with these types of questions is to use an AD/AS model/diagram – either in the border of one's response or indeed within the response - and then shift the AD curve to the left and the AS curve to the right (but by a smaller margin). The macroeconomic outcome should be revealed as a lower price level (due to both the AD and AS impact) and a lower level of real GDP (due to the AD impact outweighing the AS impact). This should help to clarify the impact on both inflation and unemployment (given that the lower level of real GDP should contribute to an increase in unemployment). Completing this in



the planning stage for this question should also clarify why price stability is the goal to choose rather than full employment (or SSEG) for this question.

Sample answer: The appreciation of the exchange rate is likely to make it easier for the RBA to achieve its goal of price stability, which is to achieve 2-3% growth in the CPI on average over time. This is because the appreciation will help to reduce both cost and demand inflationary pressures in the economy, which in turn will assist in reducing inflation back into the 2-3% target range. On the demand side, the appreciation helps to reduce net export demand (as explained in the previous response), decreasing pressure on AD and contributing to more businesses, in aggregate, willing to discount prices in order to eliminate growing stock levels. This downward pressure on demand inflation will be complemented by the reduction in prices coming from the supply side. Not only will the appreciation cause the prices of consumer imports to fall, it will also result in lower production costs given that the bulk of Australia's imports are either capital or intermediate goods [such as imported parts and machinery]. This increases margins for producers and encourages them to discount prices (further), once again contributing to a reduction in the rate of inflation.

Note 1: There is no requirement for students to give an indication of the relative strength of the (aggregate) demand and supply impacts in the context of this question provided the student focuses on price stability as the macroeconomic goal. In the event that a student focuses on the goals of full employment or SSEG (or living standards/economic prosperity and welfare of Australians), then it is possible that students will attempt to emphasise that the (aggregate) demand side impact is less pervasive such that an appreciation causes a rise in economic growth and a corresponding decrease in unemployment. This approach is incorrect, because the reverse is true and a maximum of 3 marks should be considered, assuming that the student demonstrates a sound understanding of the goal, and the explanation of the demand/supply side impacts are otherwise logical.

Note 2: Square bracketed section is not required for full marks.

e. Explain how an exchange rate appreciation might reduce the current account surplus (CAS).

14

3 marks

- 1 mark for demonstrating an understanding of the current account (surplus) and making reference to debits/credits
- 1 mark for a superficial explanation of the link between an exchange rate appreciation and a lower CAS
- or
- 2 marks for a more comprehensive explanation of the link between an exchange rate appreciation and a lower CAS

Note 1: While it is expected that students will explore the impact on the CAS via the influence on the BOMT/BOGS, teacher flexibility is required in the event that a student explores the impact via the NPI section of the current account. Full marks can certainly be achieved via this angle because, in the current climate, an exchange rate appreciation can indeed result in a lower CAS. However, the explanation for how this occurs is somewhat complicated. See Advice 2 below.

Note 2: While it is true that exchange rate movements can have an influence on the budget outcome, student response that explore this relationship and ignore the relationship between the appreciation and a lower CAS should be awarded zero marks. See Advice 1.

Advice 1: It is important that students do not confuse the current account surplus with the budget surplus, which is a common mistake made by students in the examination. It was referred to once again in the 2023 Examination Report in relation to Q3a [budget outcome and its relationship to public debt]. The Chief Assessor noted that 'some students confused the budget deficit with the current account deficit and wrote about the balance of payments implications (e.g. a deficit must be financed by a CAFA surplus via an increase in Net Foreign Debt).

Advice 2: While it is true that exchange rate movements can influence the NPI section of the current account via the effects on interest payments, it is recommended not to approach the question from this angle. Traditionally, when the bulk of Australia's foreign liabilities (including debt owed to foreigners) was dominated in foreign currency (typically USD), it meant that an appreciation of the exchange rate had a positive influence on the NPI section and current account balance. This is because it became less expensive to service foreign debt (i.e. repay the interest), leading to fewer interest debits (relative to interest credits) and decreasing the NPI deficit. However, the exchange rate effects on the NPI section of the current account is currently reversed. This is because Australia now has a 'net foreign currency asset position' with the rest of the world. The bulk of Australia's foreign liabilities (including debt owed to Australia) are denominated in foreign currency. Accordingly, an appreciation of the Australian exchange rate (i.e. a depreciation of foreign currencies such as the USD) will have minimal influence on income debits (e.g. interest/dividend payments will remain broadly the same) but reduce income credits, thereby contributing to a larger NPI deficit and downward pressure on the CAS.

Sample answer: This is because [as explained in Part c] the appreciation reduces the price competitiveness of Australia's tradeables sector, which ultimately reduces the demand for exports (reducing the size of export credits in the current account), increases the demand for imports (increasing the size of import debits in the current account) and therefore contributes to a smaller surplus on the Balance on Goods and Services (BOGS). As the BOGS is a major component of the current account [which has been the major factor ensuring the current account returned to surplus in recent years], any reduction in the BOGS will necessarily result in a smaller CAS.

Note 3: Square bracketed section is not required for full marks

f. Describe one other factor, apart from a change in the exchange rate, that might contribute to a structural increase in the current account surplus.

- 1 mark for the identification of a relevant factor (e.g. an increase in productivity or national savings)
- 1 mark for a superficial explanation of the link between the factor and a higher CAS
- or •
 - 2 marks for a more comprehensive explanation of the link between the factor and a higher CAS

Advice 1: The current Study Design requires students to demonstrate an understanding of the cyclical and structural influences on Australia's current account balance. As explained in earlier advice, it is important not to make the common mistake of confusing the structural influences on the current account balance with structural influences on the budget balance.

Advice 2: Questions related to the current account (deficit) have proved burdensome for students in the past, with questions related to the difference between the structural and cyclical factors affecting the CA or CAD being particularly problematic, as evidenced by student responses to Q4d of the 2021 exam ('explain how a change in one structural factor might result in improvement in the CA balance'). This was the most poorly handled question on the examination, with an average score of 33% and only 19% of students achieving the full 3 marks. Students should remember that structural factors are those unrelated to the economic cycle, and instead relate to the underlying factors or forces driving any particular current account outcome. For example, to the extent that higher rates of productivity growth might be a factor contributing to any improvement in the current account balance, this is a structural factor. It is quite distinct from a cyclical factor causing the current account balance to improve, which might simply be a decline in AD or national spending. For the current question, students need to 'focus on any 'non-cyclical' factor, or long-term factor, that has the potential to contribute to a higher CAS over time. Reference to factors such as an increase in national savings, increased productivity growth, greater technology uptake, higher international competitiveness, discovery of more natural resources and an increase in comparative advantage are all examples of factors that can contribute to a sustained (structural) increase in the CAS. In contrast, cyclical factors are purely related to changes in the economic cycle. Accordingly, if the current account balance changes for 'cyclical reasons', it means that it is due entirely to changes in the key macroeconomic variables of production, income and expenditure, which of course are commonly measured by changes in AD, GNE or GDP.

Sample answer: An increase in labour productivity [output per hour worked] is expected to result in a structural increase in the CAS over time because it contributes to a long term improvement in Australia's international competitiveness. Labour productivity growth reduces average labour costs, exerting downward pressure on the cost of production more generally, and enables businesses in Australia's tradeable sector to price more aggressively in the global marketplace (e.g. reducing prices without any impact on profit margins). This should increase export (X) demand relative to import (M) demand, increasing net exports (X - M), lifting the surplus on the Balance on Goods and Services (BOGS) and boosting the CAS. [It represents a structural influence on the current account because the improvement in the CAS is not driven by changes in AD or final demand, which is cyclical in nature. Instead, it is driven by changes to the structure of the economy itself, or supply side improvements, that are more sustained and unrelated to changes in the economic cycle.]

Note: Square bracketed section is not required for full marks.

Question 3 (16 marks)

'Inflation is the primary focus of the Budget in the near term. As inflation moderates, fiscal policy will shift emphasis towards promoting sustainable economic growth and public finances over time. This is achieved through a balanced approach that manages near-term risks to inflation and growth, puts in place reforms to build a stronger and more resilient economy, and safeguards fiscal sustainability.'

Source: 2024-25 Budget Paper No. 1, Page 73

a. Referring to the most recent 2024-25 Budget, outline why it can be argued that the current stance of budgetary policy is expansionary.

3 marks

- 1 mark for appropriate/accurate reference to a (estimated) budget deficit and/or a move from surplus to deficit for 2024-25
- 1 mark for demonstrating an understanding of an expansionary budgetary policy stance
- 1 mark for linking/connecting the budget outcome to an expansionary stance

Note: Students should be rewarded if they focus on the range of expansionary measures introduced in the budget, such as the stage 3 tax cuts, cost of living relief measures, additional infrastructure investment, etc. However, an appropriate/accurate reference to the budget outcome is required for full marks.

Advice 1: The Study Design continues to require students to demonstrate an understanding of the stance of budgetary policy: expansionary or contractionary. While the determination of the budgetary policy stance can be quite nuanced in reality (e.g. any given budget outcome can either be expansionary or contractionary depending on the interplay between structural and cyclical changes to the budget), it is sufficient for a 3 mark question such as this to focus on the estimated change in the outcome from the previous year, or even focus on the outcome in isolation. For example, students could focus on the fact that government expenditure exceeding government revenue implies a net injection into the economy from the federal government, which stimulates economic growth and contributes to economic recovery. Alternatively, they could focus on the movement in the budget outcome from the previous year - a move from surplus to deficit - suggesting that the government is making a net injection of funds in the economy as government expenditure is increasing relative to government revenue.

Advice 2: Question 2a of the 2022 exam required students to outline how the stance of budgetary policy might be determined (2 marks). It was one of the most poorly handled questions on the examination, with an average of 50% and less than a third of students achieving the full 2 marks. Students were expected to outline that a budget deficit is expansionary, or a budget surplus is contractionary (or that a smaller deficit is less expansionary or contractionary, etc.) before briefly justifying their position. Many students erred by focusing solely on the economic conditions existing at any given time which determines the stance of budgetary policy (e.g. if we are in a recession the budget will become expansionary). While this information was not irrelevant, students needed to elaborate on the relevance of budget outcomes when determining the stance (e.g. the size and/or movement in the budget deficit/surplus).

Sample answer: The budgetary policy stance for 2024-5 is expansionary because the government expects the budget to move from a budget surplus of \$9.3 billion for 2023-24 to a budget deficit of \$28.3 billion for 2024-25. In itself, this is expansionary because the \$37.6 billion turnaround involves the government making net injections into the economy, which means the government is making a net contribution to AD [e.g. G1 and G2 increase relative tax receipts] which helps to increase real GDP and contribute to an economic expansion.

Note: Reference to the precise figures of a \$9.3 billion estimated surplus and a \$28.3 billion estimated deficit is not required for full marks. Close approximations should be rewarded. Teacher discretion is advised.

b. Analyse how continuing low rates of unemployment and persistently high inflation have influenced the setting of aggregate demand policies over 2023-24.

6 marks

- 1 mark for identifying how the BP setting was changed (e.g. cost of living relief)
- 1 mark for identifying how the MP setting was changed (e.g. tighter MP/restrictive MP)
- 2 marks for an explanation of how the low rate of UE and high inflation influenced the setting (and/or stance) of monetary policy
- 2 marks for an explanation of how the low rate of UE and high inflation influenced the setting (and/or stance) of budgetary policy

Note: Students are free to focus on the 2023-24 Budget and/or the 2024-25 Budget when framing their response.

Advice 1: The key skills in the Study Design requires students to analyse the effect of current factors on the setting of aggregate demand policies and living standards. Students only need to explain how the two macroeconomic variables (low rate of unemployment and high inflation) have resulted in changes made to the budget by the government and changes made to monetary policy by the RBA. There is no need to make specific reference to the budgetary/monetary policy stances to achieve full marks (e.g. students can refer to monetary policy becoming tighter than otherwise without needing to refer to a more restrictive monetary policy stance).

Advice 2: In the 2023 exam, students were required to analyse how the rates of unemployment and inflation influenced the stance of aggregate demand policies in 2023. The question was poorly handled, with an average score of 45% and only 7% of students achieving the full 6 marks. Many students launched into an explanation of how the policies were implemented over recent years, without any attempt to analyse the implications that a low UE rate and a high inflation rate had for the stances of MP and BP. While the question was relatively easier in relation to the stance of MP, there was general uncertainty about how to analyse the BP impact. Students could potentially achieve full marks by arguing that the stance of BP became more expansionary <u>or</u> contractionary. It was the arguments put forward that were important from an Examiner's point of view. The best responses were from students who linked the low UE rate and high inflation rate to a change in budgetary policy settings (e.g. the movement in the cyclical or structural components of the budget) before making relevant comment about the implications this had for the stance of BP. It is important not to make the mistake (as some did) of ignoring reference to one of the two AD policies', students need to explicitly address both MP and BP.

Sample answer: The relatively low rates of unemployment and persistently high rates of inflation has caused the federal government to become increasingly concerned about the inflationary pressures existing in the economy that were making it more difficult for the RBA to achieve its goal of price stability [2-3% growth in the CPI on average over time] and increasing the financial burden on Australian households. It therefore delivered the most recent budget(s) with the intention of providing cost of living relief to households, such as the fuel excise relief in 2023 and the energy bill relief/rebates in 2024. These types of measures were designed to 'directly' reduce petrol/energy prices, as they were effectively provided as producer subsidies that were fully passed on to consumers. [The government has also made it clear that the recent budget was framed with inflation reduction in mind. It therefore was intent to deliver reforms in the budget that were focused on lifting productive capacity and achieving low inflationary growth into the future.]

Similarly, low rates of unemployment and persistently high rates of inflation resulted in the RBA further tightening monetary policy at the end of 2023, increasing the cash rate to make monetary policy more restrictive. This is because the RBA has remained concerned about price instability in the economy [i.e. inflation that is stubbornly in excess of 3%] and has been prepared to constrain the growth in aggregate demand [as it believes that an output gap has existed in the economy with AD growing too fast relative to AS]. Since December 2023, it has continued to maintain the cash rate at a restrictive 4.35% despite the emergence of numerous economic indicators suggesting that the economy was approaching a recession [including the fact that real GDP per capita has been declining]. The RBA believes that this current restrictive stance/setting will deliver a return of inflation back into the target range by the middle of 2025.

c. Describe one structural influence and one cyclical influence on the budget outcome over the past year.

4 marks

- 0.5 marks for an identification of a structural influence on the budget outcome
- 1.5 marks for an accurate description of how the structural influence caused a change in the budget outcome
- 0.5 marks for an identification of a cyclical influence on the budget outcome
- 1.5 marks for an accurate description of how the cyclical influence caused a change in the budget outcome

Advice 1: The Study Design requires students to demonstrate an understanding of the effects of automatic and discretionary changes in the budget on the budget outcome (as well as the effect of automatic and discretionary changes in influencing aggregate demand and stabilising the business cycle). It is quite common for students to lose valuable marks in the examination by misinterpreting questions that relate to the cyclical (and structural) influences on the budget. First, students should be aware that the cyclical influences of the budget refer to the impact that automatic stabilisers will have on the budget (outcome) and the structural influences on the budget outcome refer to deliberate policy decisions (discretionary stabilisers) that change receipts and/or payments of the federal government.

Advice 2: Students need to remember that in relation to automatic and discretionary stabilisers more generally, they can be examined from two angles. First, the impact that they can have on the budget outcome – which is the nature of the current question. Second, the impact that they can have on the economy (e.g. the impact on AD and the business cycle). It is not uncommon for students to write a brilliant response, demonstrating a clear understanding of how automatic/discretionary stabilisers impact on the budget outcome, when the question is actually asking students to explain how these stabilisers impact on the economy (e.g. AD and economic growth).

Advice 3: As noted earlier, it is common for students to confuse a structural influence on the budget with a structural influence on the current account balance. This was a problem for students completing Q2c of the 2022 examination, where they were required to 'explain how a change to one structural component of the 2022–23 Budget may influence aggregate demand and the achievement of the domestic macroeconomic goal of strong and sustainable economic growth'. Many students incorrectly referred to events like a decrease in the savings and investment imbalance helping to improve the current account balance.

Sample answer: One clear structural influence on the recent 2024-25 Budget is the introduction of the stage 3 personal tax cuts [on the 1st of July 2024]. By their very nature, these tax cuts result in a reduction in federal government tax receipts relative to government expenditure and therefore contribute to the budget moving from a [estimated] surplus in 2023-24 [of \$9.3 billion] to a [estimated] deficit in 2024-25 [of \$28.3 billion]. A cyclical influence on the recent [estimated] budget is the decline in the terms of trade that is expected to occur over the course of 2024-25, which leads to an automatic reduction in company tax receipts for the government as company revenue/profits decline [in the face of lower commodity prices]. This also contributes to the budget moving from a [estimated] surplus in 2023-24 to a [estimated] deficit in 2024-25.

d. Describe a weakness of budgetary policy in terms of its ability to improve Australian living standards. Use a recent example to illustrate.

3 marks

- 1 mark for an identification of a relevant weakness and demonstrating an understanding of living standards
- 1 mark for an accurate and logical description of how it makes budgetary less effective at boosting living standards
- 1 mark for reference to a relevant example

Sample answer: A weakness of budgetary policy relates to the fact that it is devised and delivered by the political party with a majority in the House of Representatives (of parliament) rather than an independent (non-political) body such as the RBA. This means that budgetary policy decision making can become heavily politicised, leading to the implementation [or non-implementation] of policies that are geared towards 'retaining power' (i.e. winning votes) rather than being geared towards what is in the economic/social best interest of the country. For example, the Labor government has refused to introduce tax reforms (e.g. reforms that would reduce the tax advantages for housing

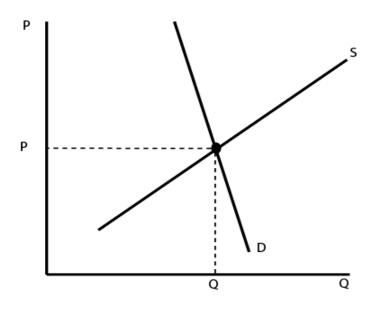
investors, an issue that is contributing to the housing affordability crisis'), as these reforms can be politically damaging. To the extent that these reforms are in the best interests of the nation, helping to advance 'living standards' by addressing housing affordability, the inaction by the current government can be considered a weakness of this arm of government policy.

Note: Squared bracketed section is not required for full marks.

Question 4 (21 marks)

Between May 2023 and May 2024, electricity prices increased by 6.5%, driving up the cost of living and having implications for resource allocation. The closure of power stations that generated coal fired electricity has contributed to these higher electricity costs as governments are intent on finding ways to reduce our reliance on this relatively dirty form of energy and transition to cleaner alternatives.

Market for coal fired electricity



a. With reference to the demand/supply diagram above, explain why the demand curve for coal fired electricity being drawn with a relatively steep slope.

3 marks

- 1 mark for identifying that it is due to a low price elasticity of demand for electricity or for asserting that consumers are relatively unresponsive to price changes
- 1 mark for demonstrating an accurate understanding of the PED in the context of the question
- 1 mark for reference to a relevant factor driving the low PED in the market for (coal fired) electricity

Advice: The Study Design requires students to demonstrate an understanding of the meaning and significance of price elasticity of demand (PED) as well as the factors affecting PED: degree of necessity, availability of substitutes, proportion of income and time. Students typically struggle writing responses to questions related to the meaning and significance of the PED. For example, Question 6 (Part A) of the 2022 was poorly handled, with students struggling to determine which of the following goods had the highest PED: cigarettes, haircuts, soft drinks and international travel. In addition, Question 1c (Part B) of the 2019 exam required students to demonstrate an understanding of PED (in relation to the demand for housing). Only 27% of students managed to score the full 3 marks for that question, with the overwhelming problem being the inability of students to demonstrate a sufficiently clear understanding (e.g. a definition) of PED.

Sample answer: The demand for coal fired electricity has been drawn with a steep slope because the demand for (coal fired) electricity is relatively price inelastic [i.e. the price elasticity of demand is low]. This means that any given increase in the price of electricity will result in a less than proportional reduction in the quantity demanded. [For example, a 6% rise in the price of electricity Is likely to result in a fall in the demand for electricity by much less than 6%.] This is due to

the fact that electricity [coal fired or otherwise] is a necessity for most households/businesses, where there are very few substitutes and consumers cannot easily switch to alternative sources of energy when prices increase.

Note: Squared bracketed section is not required for full marks.

b. Describe one factor that might cause the slope/gradient of the demand curve for coal fired electricity to flatten (i.e. become less steep).

2 marks

- 1 mark for identifying a relevant factor that causes the PED to rise (or the demand curve to flatten)
- 1 mark for an accurate description of why or how the factor causes the PED to fall (or the demand curve to flatten)

Sample answer: One factor that will cause the PED for coal fired electricity to rise [i.e. flatten the slope of the demand curve] will be an increase in the availability of substitutes for this form of electricity, such as the increased supply or availability of greener and cleaner forms of energy (e.g. electricity produced by solar or wind farms). This reduces the reliance of businesses/households on coal fired electricity, leading to a larger reduction in demand when the price rises for this form of electricity.

Note 1: Squared bracketed section is not required for full marks.

Note 2: There is no need for students to refer to the decrease in demand (shift of the demand curve to the left). However, additional reference to this decrease in demand should not detract from the quality of the response.

c. Analyse how one non-price factor will cause a rightward movement along the supply curve for coal fired electricity, resulting in a new equilibrium price and quantity. Use the diagram at the start of the question to illustrate.

5 marks

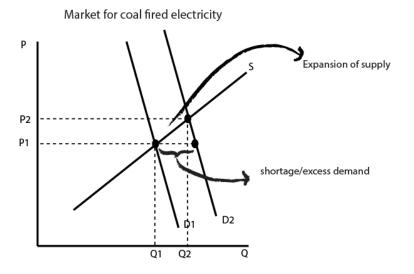
- 1 mark for appropriate use of the diagram to illustrate (e.g. shifting the demand curve to the right and indicating higher P and Q)
- 1 mark for the identification of a non-price factor and reference to higher P and Q
- 3 marks for an explanation of both the expansion of supply (i.e. why supply increases) and the adjustment to the new equilibrium

Advice 1: Question 4b of the 2023 exam proved to be one of the most challenging questions on the paper, with an average score of 48%, and only 22% of students receiving full marks. The question required students to construct a fully labelled D/S diagram and use it to analyse how one non-price factor will cause a leftward movement along the demand curve for new houses, resulting in a new equilibrium P and Q. The wording of the question was rather unique and caused too many students to (mis)interpret it as a 'leftward shift of the demand curve'. This resulted in them shifting the demand curve to the left. Instead, they needed to shift the supply curve to the left and comment on the contraction of demand (i.e. the movement back/leftward movement along the demand curve). The current question is similar in vain, with students required to analyse a shift to the right of the demand curve and the consequent expansion of supply (i.e. the movement up along/rightward movement along the supply curve).

Advice 2: The Study Design requires students to be aware of a number of non-price factors that are likely to affect demand and the position of the demand curve. Students should therefore expect to make use of the factors listed in the Study Design, which are: disposable income, the prices of substitutes and complements, preferences and tastes, interest rates, population demographics and consumer confidence.

Sample response: A rightward movement along the supply curve (i.e. an expansion of supply) indicates that the demand curve will have shifted to the right, as shown in the diagram. This might be caused by an increase in the demand curve for [all forms of] electricity, such as an increase in demand caused by a prolonged cold spell over winter and therefore the greater need for electricity to fuel heaters [or indeed the reduction in the availability of substitutes, such as solar electricity, during this time]. This causes the demand curve to shift to the right from D1 to D2, resulting

in a shortage [or excess demand] at P1. As a result, the price is likely to be bid up by producers of coal fired electricity and it encourages producers to increase supply to the market (i.e. an expansion of supply) to take advantage of the increased profit opportunities. As the price increases, demand will also contract because energy is now less affordable, leading to an eventual elimination of shortage once the price reaches P2, with a new higher equilibrium quantity at Q2.



d. Define market failure and explain how an increase in the production of coal fired electricity can be associated with market failure. Make appropriate reference to one of the market failures listed in the Study Design.

5 marks

- 2 marks for an accurate and comprehensive definition of market failure
- 1 mark for appropriate reference to a market failure listed in the Study Design (i.e. negative externalities in production or consumption)
- 2 marks for an accurate and comprehensive explanation for why the production of coal fired electricity is associated with the relevant market failure.

Advice 1: The Study Design requires students to demonstrate an understanding of the various types of market failure: public goods, externalities, asymmetric information and common access resources. Students have been required to demonstrate some understanding of 'market failures' in all but one of the exams over the life of the previous Study Design (with no such question in the 2019 exam) and both exams over the life of the current Study Design (i.e. 2023 and 2024). Most recently, Question 4c of the 2023 exam required students to 'explain one type of market failure that may be associated with the construction of new housing'. It was not well handled by most students, with an average score of 50% and only 20% of students receiving full marks. While students were expected to focus on negative externalities, they were free to explain other types of market failures, such as positive externalities (e.g. external benefits associated with higher density living, enhanced street appeal, greater housing affordability), asymmetric information (e.g. new home buyers being duped into contracts on the basis of false or misleading information) or even common access resources (e.g. development that encroaches on natural environment and contributes to resource depletion). Those students who selected 'public goods' struggled to do well in this question.

Advice 2: It is important not to confuse market shortages or surpluses with market failures, as a number did in the 2023 exam. For example, they argued that the construction of too many houses could lead to an excess supply of houses, or that the construction of too few houses will lead to shortages, represented a failure of the market to achieve equilibrium. Students should be reminded that market disequilibrium is typically a feature of properly functioning markets and it does not represent market failure. Instead, a focus was required on problems potentially occurring in markets that lead to inefficient outcomes that need some form of government intervention. For future reference, the safest approach is to focus on the market failures listed in the Study Design.

Advice 3: Question 4b of the 2022 exam required students to 'explain one reason why the excess consumption of sugar may cause market failure'. The question was poorly handled, with only 18% of students achieving full marks and a low average of 47%. A number of students failed to recognise that excess sugar consumption represents a failure of free/unregulated market to achieve the most efficient allocation of resources. However, more importantly, too many

students were unable to establish a relevant connection to a recognised market failure (e.g.. negative externalities, asymmetric information or 'de-merit goods').

Advice 4: Question 3b of the 2021 exam focused specifically on 'common access resources', with specific reference to the 'market for fish'. Only 33% of students were able to achieve the full 3 marks, with a key problem being an unpreparedness to refer to the key characteristics of non-excludability and depletability. When attempting to demonstrate an understanding of both common access resources and public goods, students should always attempt to make meaningful reference to these important characteristics, remembering that public goods are both non-excludable and non-depletable (non-rival). This also proved to be problematic for some students in the 2017 exam when being asked to distinguish public goods from common access resources.

Advice 5: The 2018 exam required students to explain how either externalities or asymmetric information results in a market failure. For externalities, students should always clarify whether they are referring to positive externalities (in production or consumption) or negative externalities (in production or consumption) and to refer to third party (or social) costs or benefits when examining how the presence of externalities leads to a sub-optimal allocation of resources. For asymmetric information, students should attempt to highlight how the information asymmetry results in errant decision making that also leads to sub-optimal allocation of resources. Past examinations reveal that students find asymmetric information the most difficult example of market failure to explain. So, if choice is provided in the examination, it is recommended that students select a type of market failure that they are most comfortable with (which in most cases means avoid asymmetric information).

Sample answer: Market failure refers to the situation where free/unregulated markets [i.e. markets left unregulated by governments] are unlikely to result in the most efficient allocation of resources in society such that living standards will not be maximised. Allocative efficiency will not be achieved as there will be an underallocation of resources to the production of some goods and services that are in society's best interests [such as public goods and those with positive externalities in production and consumption] and/or an overallocation of resources to the production of some goods and services [such as de-merit goods and those with negative externalities in production].

An increased production of coal fired electricity is associated with market failure because this type of energy results in negative externalities [in both production and consumption] in the form of excessive carbon pollution [and the resulting climate change]. Without government regulation or intervention, producers [and consumers] will typically not take into account the external or social costs that are associated with the production [or consumption] of coal fired electricity. Accordingly, the market price of coal fired electricity will be too low, with an excessive volume of coal fired electricity being produced, as the external costs are passed onto society more generally. Overall, the market fails to achieve the most allocatively [and intertemporally] efficient allocation of resources because there will be an over allocation of resources to the production of coal fired electricity.

Note: Squared bracketed section is not required for full marks.

e. Explain how the government can use a market based environmental policy initiative to address the market failure referred to above. In your response refer to the role of relative prices and one type of efficiency.

6 marks

- 1 mark for the identification of one market based environmental policy initiative
- 1 mark for additional information describing the nature of the environmental policy
- 1 mark for appropriate reference to relative prices
- 1 mark for appropriate reference to a type of efficiency
- 2 marks for appropriately linking the policy initiative to a correction of the market failure

Advice 1: A new key knowledge point introduced into the current Study Design is the requirement for students to demonstrate an understanding of one market-based environmental policy and its short-term and long-term effects on aggregate supply, intertemporal efficiency and living standards. Students are not required to use any specific market-based environmental policy and are therefore free to select any existing or theoretical policy option, whether in Australia or abroad.

Advice 2: An understanding of relative prices (and the price mechanism) is a fundamental building block for understanding the nature of economics in a market system and a structured/short answer question testing this part of the course was only asked only twice over the life of the previous Study Design – in 2020 and 2022 and there was no specific reference to relative prices in the 2023 exam. It is an area of VCE Economics that consistently troubles students, with average results regularly falling below 50%. While the average score on the 2020 exam was a relatively high 58%, only 18% of students achieved full marks. That question required students to 'explain how an increase in demand for a product might result in a change in relative prices, and explain how this would influence resource allocation and living standards'. The 2022 version (Q4c), required students to use a D/S diagram to illustrate and analyse how one form of government intervention might lead to a change in relative prices and the allocation of resources. The average score was 57%, only 16% of students achieved full marks. The best performing students were those who were able to clarify how the change in relative prices ultimately sends important signals to producers/consumers, and then explain how this causes resources to move from the production of one good to another. In that question, it was important that the explanations provided by students were not inconsistent with the information conveyed in the diagrams that were drawn/presented in the exam – which was a common error. It was also important that students use any diagram in a meaningful way to illustrate how resources are reallocated and avoid an overemphasis on explaining the dynamics of adjustment from one equilibrium to another. For the current question, while the question does not mandate the use of a D/S diagram, there is no problem for students to include one (or refer to the one in the question), so long as it adds value to the response.

Advice 3: In Q4c of the 2022 exam (referred to above), it was common for students to examine how the market adjusts to a new equilibrium as a result of the government intervention (e.g. the provision of a subsidy), but then fail to consider how the change in relative prices results in a reallocation of resources. The best performing students were able to recognise the importance of focusing on how resources are allocated from one activity to another, rather than focusing on the possible impact on a type of efficiency (e.g. technical or allocative efficiency).

Sample answer: A market-based environmental policy that could be introduced is some form of carbon pricing, such as a carbon tax or the implementation of emissions trading scheme. When a price is placed on carbon, such as a carbon tax, producers of coal fired electricity are forced to pay a tax to the government based on the volume of carbon emitted and it therefore effectively addresses the market failure by internalising the negative externality – producers now pay for the external/social costs. The tax works to increase the cost of production for these carbon emitters, which reduces their ability and willingness to supply. As a result, they are likely to pass on some or all of the cost to consumers, which causes an increase in both the absolute price and the relative price of coal fired electricity. The higher relative price changes both consumer and business behaviour. Producers of coal fired electricity will have an incentive to change methods of production in order to emit less carbon (and therefore pay less tax) and/or seek alternative forms of production (such as transition into the production of cleaner energy). The higher prices will also cause a contraction of demand for coal fired electricity, due to lower affordability, and encourage substitution into more environmentally friendly options, such as wind and solar energy, whose prices are relatively lower and therefore more attractive. The change in behaviour should therefore result in an improvement in intertemporal efficiency, where the balance between consumption today and consumption in the future is improved [i.e. resources are effectively preserved for the future and a more sustainable use of resources is achieved]. Overall, as consumers and producers change their consumption and production away from coal fired electricity [and towards greener substitutes], it reduces carbon emissions, helps to mitigate climate change and helps to improve both intertemporal and allocative efficiency.