COMMERCE PRESENTATIONS AND PUBLICATIONS

VCE ECONOMICS UNIT 3/4

CPAP Practice examination A 2023

SUGGESTED RESPONSES, MARKING SCHEME AND ADVICE

Answers to MC questions

1	A	**B**	C	D
2	A	**B**	C	D
3	A	B	C	**D**
4	**A**	B	C	D
5	A	B	C	**D**
6	A	**B**	C	D
7	**A**	B	C	D
8	A	**B**	C	D
9	**A**	B	C	D
10	A	B	C	**D**
11	**A**	B	C	D
12	A	**B**	C	D
13	**A**	B	C	D
14	A	B	**C**	D
15	A	**B**	C	D

SECTION A

Question 1
The differences between real income and disposable income is best summed up as follows:

A. Real income represents the purchasing power of income whereas disposable income represents income after paying interest on loans
B. Real income represents income after taking inflation into account whereas disposable income represents income after taking taxes into account
C. Real income represents income less taxes whereas disposable income represents income less inflation
D. Real income represents income less direct taxes whereas disposable income represents income less indirect taxes

The 2022 External Examination Report revealed that many students demonstrated gaps in their understanding of real income and disposable income when responding to Question 1c of the examination. In that question, students needed to explain how an aggregate demand (and aggregate supply) factor influenced the rate of inflation and less than one third of students were able to score the full 4 marks. For example, some students used disposable income as the AD factor but implicitly (or explicitly) defined it as income after inflation (instead of income after tax). Students should ensure that they refer to the correct 'income measure' when describing AD factors affecting economic activity. For the current question, ***Option B is the best response*** *because it is most accurate in relation to the summation of the difference between the two terms. Option A is invalid because, despite the reference to real income being accurate, the reference to disposable income is inaccurate (as it refers to interest on loans instead of taxes to the government). Option C is incorrect because the reverse is true – real income represents income less inflation whereas disposable income represents income less taxes. Option D is incorrect because the difference between the two concepts is unrelated to direct versus indirect taxes.*

Question 2
The price elasticity of demand is likely to be highest for:

A. Fuel for a motor vehicle
B. A holiday package to Bali
C. A 500g packet of sugar
D. A tractor

In these scenarios, it is useful to remember the factors affecting the PED that are listed in the Study Design: degree of necessity, availability of substitutes, proportion of income and time, and determine their relevance for the goods or services in question. ***Option B is the best response*** *because a holiday package to Bali is more likely to be a luxury and less likely to be a necessity, which results in a relatively high PED. With respect to option A, fuel for a motor vehicle is more likely to be a necessity (as fuel has few substitutes), resulting in a relatively low PED. With respect to option C, a 500g packet of refined sugar is also likely to have a low PED because it is more likely to be a necessity (even addictive) as well as representing a small proportion of income. With respect to option D, a tractor is also likely to have a low PED because it is a producer good that is more likely to be a necessity for producers (e.g. farmers). Students should learn from the mistakes made by students in the 2022 exam. Question 6 (Part A) of that exam required students to determine which of the following goods had the highest PED: cigarettes, haircuts, soft drinks and international travel. Most students were able to eliminate cigarettes and haircuts, recognising that they were more likely to be necessities, thereby making the PED relatively low (inelastic). However, students struggled to separate soft drinks and international travel, with a relatively high 28% of students believing that soft drinks were likely to be more price elastic. In these scenarios, it is useful to remember the factors affecting the PED and determine their relevance for the goods or services in question. In relation to 'proportion of income', international travel is likely to be more price elastic owing to the high cost of travel. Similarly, in relation to 'degree of necessity', international travel is likely to be more price elastic owing to the fact that it is more likely to be a luxury, on average compared to soft drinks. In contrast, soft drinks have an addictive element owing to their high sugar content making them likely to be less price elastic. In relation to 'availability of substitutes', on the face of it, it could be argued either way. However, the question refers to 'soft drinks', not a brand of soft drink – the latter being more price elastic than the former. On balance, international travel has a higher PED than generic soft drinks.*

Question 3
Which of the following goods or services is not likely to be considered a public good?

A. Prison services
B. Defence services
C. Lighthouse services
D. Education services

This question is based on the most difficult multiple-choice question from the 2021 exam. Question 10 of that exam asked students to select which of the following four goods is NOT likely to be considered a public good: A. a fireworks display, B. street lighting, C. healthcare services, D. free-to-air TV broadcasts. Only 48% of students selected the correct option (i.e. C. healthcare services), with 32% selecting A, not appreciating that a fireworks display is indeed likely to be considered a public good. For these types of questions relating to public goods, it is important that students focus on the key characteristics of public goods: i.e. non-excludability and non-depletability (non-rivalrous in consumption) and to carefully consider each of the possible options to determine whether they meet both of these characteristics. Once this is done it should become evident that a fireworks display, streetlighting and free-to-air TV broadcasts all meet the characteristics of public goods. The inability of 52% of students to recognise that health care services is not an example of a public good is likely to stem from confusion related to the difference between goods with positive externalities in consumption (and/or merit goods) and public goods. For example, health care services, like education, is an example of a good/service that is only partly non-excludable and partly non-depletable. In other words, it is possible to exclude only some consumers who are not prepared to pay for the service (but not all consumers) and it is also the case that one person's consumption of the service can, to some extent, prevent another person from consuming the same services (e.g. a private consultation with a medical specialist for a fee). With respect to the current question, ***option D is the best response*** *because the provision of education services (like healthcare referred to above) is an example of a good that is only partly non-excludable and partly non-depletable, therefore failing meet the strict criteria to be considered a public good. All other options A – C are examples of public goods because they are both non-excludable and non-depletable.*

Question 4
With respect to the Financial Account of Australia's Balance of Payments, Credits will tend to rise when:

A. the Government budget deficit increases
B. the household savings ratio increases
C. the terms of trade increases
D. Australia enjoys a large increase in productivity

Option A is the best response *because a higher budget deficit contributes to the demand for funds from abroad (i.e. capital inflow) and results in foreign investors purchasing Australian Government Securities (or Bonds) in financial markets. This is a technical way of saying that the Government will typically finance (part of) its larger budget deficit via some borrowing from overseas. As the money enters the country it is recorded in Australia's balance of payments as a credit (inflow) in Financial Account of the CAFA. [Note that this is not the same as saying that a budget deficit will <u>always</u> lead to an increase in credits within the CAFA, as it is possible for the deficit to be directly and exclusively financed by bond sales to domestic investors.] Option B is invalid because an increase in household savings ratio means that there is likely to be less of a requirement for Australia to source foreign funds. Option C is invalid because a higher terms of trade helps to generate an increase in net export values, boosting the BOGS surplus and reducing the size of any CAD (or increasing the CAS). This means that Australia relies less on foreign sources of capital and credits in the Financial Account are likely to be lower. Option D is invalid because a large increase in productivity will tend to reduce per unit costs of production, which leads to lower prices/inflation and an increase in international competitiveness of Australian businesses. This reduces the CAD (as X-M increases) and means that Australia relies less on foreign sources of capital and credits in the Financial Account are once again likely to be lower.*

Question 5
Material living standards are likely to fall and non-material living standards are likely to rise if:

A. access to goods and services rises and pollution increases
B. climate change accelerates and more goods and services are produced
C. literacy rates fall and crime rates decrease
D. real GDP per capita declines and air quality improves

The new Study Design continues to require students to demonstrate an understanding of the difference between material and non-material living standards, as well as the factors that may influence living standards including, access to goods and services, environmental quality, physical and mental health, crime rates and literacy rates. ***Option D is the best response*** *because a fall in real GDP per capita represents a decline in one of the most common measures of material living standards, while an improvement in air quality is likely to represent an improvement in non-material living standards. Options A and B are incorrect because the measures point to a rise in material living standards and a fall in non-material living standards. Option C is incorrect because one measure points to fall in non-material living standards (i.e. lower literacy rates) and the other points to rise in non-material living standards (i.e. lower crime rates)*

Question 6
The recent Budget, handed down in May 2023, estimated that the budget outcome for 2022-23 would be $4.2 billion surplus. However, by late July 2023, the surplus is now estimated to be approximately $20 billion. Which of the following statements is most accurate in relation to the information above?

A. The structural component of the budget has improved and the level of gross government debt is likely to fall
B. The cyclical component of the budget has improved and the level of gross government debt is likely to fall
C. The cyclical component of the budget has improved and the level of gross government debt is likely to rise
D. The structural component of the budget has improved and the level of gross government debt is likely to rise

In relation to questions on automatic vs discretionary stabilisers in the Budget, students should first appreciate that automatic stabilisers relate to the cyclical component of the budget and discretionary stabilisers relate to the structural component of the budget. Second, students should be prepared for questions that test their understanding of the impact that these stabilisers could either have on AD, economic growth, the business cycle and the achievement of macroeconomic goals. Third, students should also be prepared for questions test their understanding of the impact that these stabilisers might have on the budget outcome and/or government debt – which relates to the current question. In examinations, questions related to automatic and discretionary stabilisers are often poorly handled by students. This included the 2022 exam, with students performing relatively poorly for questions 2b and 2c (average scores of only 50% and only 20-21% of student achieving full marks). For the current question, ***Option B is the best response*** *because over 2022-23, employment growth and commodity prices/terms of trade have continued to be stronger than anticipated at budget time, which automatically increases government tax revenue relative to expenditure, and leads to a cyclical increase in the budget surplus. [Students who recognise that it is indeed possible that structural changes/improvements to the Budget 'might' have been made between May and June 2023 should understand that this is both less likely and inaccurate in light of both continuing low unemployment and a relatively strong growth in commodity prices.] The increase in the size of the budget surplus means that the government can repay more of its existing debt, which reduces the level of gross government debt. All other options have at least one or both of the relevant variables moving in the wrong direction.*

Question 7
Assume that the government's budget figures for a particular year included the following:

	$ billion
Cash receipts	100
Cash payments	120
Receipts from sale of assets for policy purposes (e.g. sale of a Government Business Enterprise)	7
Payments for financial assets for policy purposes (e.g. investment in the NBN Co)	12

Which statement below is accurate:

A. *The headline budget outcome is a deficit of $20 billion and the underlying budget outcome is a deficit of $15 billion*
B. The headline budget outcome is a deficit of $20 billion and the underlying budget outcome is a deficit of $25 billion
C. The headline budget outcome is a surplus of $20 billion and the underlying budget outcome is a deficit of $15 billion
D. The headline budget outcome is a surplus of $20 billion and the underlying budget outcome is a deficit of $25 billion

The new Study Design now only makes specific reference to the underlying cash balance (reference to the headline balance has been removed), which might imply that students are not required to demonstrate an understanding of the headline outcome. However, given that the underlying outcome is derived from the headline outcome, it is wise to spend some time knowing the difference between the two budget outcomes. The Study Design also continues to require students to calculate relevant economic indicators using real or hypothetical data, and this skill was tested in Section A of every exam over the life of the previous Study Design, including two questions (5 and 9) on the most recent 2022 exam). Students often struggle selecting the right response when calculating hypothetical statistics, so it is reasonable to expect at least one question to appear in Section A of the 2023 examination. In the 2020 exam, students were required to calculate the underlying cash surplus from the hypothetical figures and it was the most poorly handled question on the paper with only 14% of students choosing the correct response. Students should note that the method of calculating the underlying cash balance changed since 2021. Future Fund earnings are no longer taken away from the headline balance to arrive at the underlying balance. It is therefore easier for students to determine the underlying outcome in the event that a question surfaces on the exam, such as the question from the 2020 exam. ***Option A is the correct response*** *because the net cash flow from Investment in financial assets for policy purposes is -$5 billion (i.e. $7 billion - $12 billion) and it is this figure that is removed from the headline deficit of $20 billion ($100 billion - $120 billion) to arrive at an underlying budget outcome of -$15 billion (i.e. a budget deficit of $15 billion). To reconcile the two outcomes, students can either deduct the 'net' cash flows from the headline deficit to arrive at the underlying deficit of $15 billion– this is summarised in Table 1 below.*

Table 1

Cash receipts	*100*
Less cash payments	*120*
Headline deficit	***20***
Net cash flow from Investment in financial assets for policy purposes	*-5*
Underlying deficit	***15***

Alternatively, students can deduct the receipts from sale of assets for policy purposes from the headline (cash) receipts to arrive at a figure for underlying receipts and then deduct the payments for financial assets for policy purposes from the headline payments to arrive at a figure for underlying payments. Underlying payments are then deducted from underlying receipts to arrive at the same underlying deficit of $15 billion. This is summarised in Table 2 below.

Table 2

Headline receipts	*100*
Minus receipts from sale of assets for policy purposes	*7*
Underlying receipts	***93***
Headline payments	*120*
Minus payments for financial assets for policy purposes	*12*
Underlying payments	***108***
Underlying receipts less Underlying payments = underlying balance	***-15***

Question 8

Carefully analyse the key labour market statistics below, taken from the ABS' June release of 'Labour Force, Australia'

Key labour force statistics – June 2023	
Employed people	14,045,800
Unemployed people	505,500
Unemployment rate	3.5%
Underemployment rate	6.4%
Participation rate	66.8%

Source: Australian Bureau of Statistics, Labour Force, Australia June 2023

Which of the following statements is false?

A. The labour force underutilisation rate is 9.9%
B. The size of the working age population is 14,551,300 people
C. The number of people working more than 1 hour per work is 14,045,800
D. The number of people underemployed is 931,283

As noted in the comments provided for the previous question, 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'. It is advisable for students to annotate their examination paper by including the relevant formula required or the necessary calculations. Given that students are permitted to use scientific calculators in the examination for the first time, they can expect to perform slightly more complex calculations than in past in the sense that real, rather than hypothetical, numbers are more likely to be used compared to previous exams. Despite this, for the current question, students are able to arrive at the ***correct answer, which is option B,*** *without performing much of a calculation once they recognise that 14,551,300 people actually represents the size of the labour (i.e. 14,045,800 + 505,500) and not the size of the working age population. The latter must be significantly higher given that the labour force represents 66.8% of the working age population, which represents the participation rate. [The working age population is derived by dividing the labour force by 0.668 to arrive at a figure of 21,783, 383 people.] Option A is true because the labour force underutilisation rate is made up of both the unemployment rate (3.5%) and the underemployment rate (6.4%) or 3.5% + 6.4% = 9.9%. Option C is true because the total number of people employed (i.e. 14,045,800), by definition, is made up of everybody who is working more than one hour per week. Option D is true because 6.4% of the labour force is underemployed (i.e. the underemployment rate) and this is calculated by multiplying 0.064 by the size of the labour force (14,551,300) to arrive at a figure of 931,283 people.*

Question 9

Australia's inflation rate was 0.8% for the June quarter of 2023, down from a rate 1.4% for the March quarter. This means during the June quarter of 2023:

A. household purchasing power over goods and services decreased
B. consumers will be able to afford more goods and services
C. the consumer price index decreased
D. the prices of goods and services decreased on average

The new Study Design requires students to know the difference between disinflation and deflation. Student responses over many years reveal some confusion between the terms, with students being unclear about the implications for price movements, competitiveness, purchasing power, etc. when prices fall (deflation) compared to when the rate of growth in prices falls (disinflation). Students need to appreciate the different effects that stem from inflation, disinflation and deflation and a question is likely to surface somewhere on the 2023 exam that tests this new key knowledge. For the current question, given that for the June quarter of 2023, Australia's rate of inflation has fallen compared to the March quarter, it reflects a period disinflation (not deflation). As such, household purchasing power over goods and services continued to fall during the June quarter (as inflation persists), which makes ***option A the best response****. Option B is incorrect because inflation still exists during the June quarter, which results in consumers being able to afford fewer (not more) goods and services. Option C is incorrect because the CPI must have risen for inflation (of 0.8%) to have*

occurred during the June quarter. Option D is incorrect because prices of goods and services have increased on average (by 0.8%) during the June quarter.

Question 10
Which of the following is least likely to represent a benefit for Australia of engaging in international trade of goods and services?

A. lower prices
B. more choice for consumers
C. more access to productive resources
D. lower wages

The Study Design requires Students to demonstrate an understanding of 'the gains from international trade, including lower prices, greater choice, access to resources, economies of scale, and increased competition and efficiency'. ***Option D is the best response*** *because the lower wages that can be a consequence of greater international trade of labour services can be considered both a cost of trade (e.g. for those workers whose wages are depressed by the increased supply of foreign labour services) and a benefit of trade (e.g. for businesses who are typically keen to embrace cheaper labour costs). Each of the options A – C are less ambiguous in terms of each representing a benefit of trade.*

Question 11
Which of the following is not an example of the use of unconventional monetary over the past couple of years?

A. An increase in the cash rate by 12 times in the space of 13 months
B. Purchases of bonds by the RBA designed to reduce longer term interest rates
C. Forward guidance by the RBA to create certainty about the direction of interest rates
D. The establishment of a term funding facility for the banking system

A new key knowledge in the Study Design is the requirement for students to be aware of one example of the operation of an unconventional monetary policy tool from the past two years. ***Option A is the best response*** *because an increase in the cash rate is an example of the use of conventional monetary policy. This remains the case despite the fact that has been quite aggressive in its tightening of monetary policy over the past 13 months. All other options are valid examples of how the RBA used unconventional monetary policy between 2020-2022 to assist conventional monetary policy efforts in stimulating the economy during the economic downturn at the time.*

Question 12
Which of the following is not an aggregate demand or aggregate supply factor that contributes to lower growth in average prices of goods and services over time?

A. Growth in productivity
B. A rise in the price of a complementary good or service
C. A reduction in consumer confidence levels
D. Lower rates of economic growth overseas

The Study Design requires students to have knowledge of 'aggregate demand and aggregate supply factors that have affected the level of achievement or non-achievement of the goals of strong and sustainable economic growth, full employment and low and stable inflation over the past two years'. When demonstrate an understanding of this part of the course, students should not confuse aggregate demand and aggregate supply factors studied in Unit 3 AOS 2 (where the focus is on the macroeconomic effects) with 'non-price factors likely to affect demand and the position of the demand curve…' studied in Unit 3 AOS 1 (where the focus is on the microeconomic effects). In Question 1c of the 2022 exam, students needed to explain how an aggregate demand (and aggregate supply) factor influenced the rate of inflation. As noted in the Advice provided for Question 1 earlier, less than one third of students were able to score the full 4 marks. A common problem included students adopting too micro a focus (i.e. referring to a microeconomic demand and/or supply factor) and explaining an increase in the price of specific goods or services, when they needed to remain focused on aggregate demand and supply factors. ***Option B is the best response*** *because it represents a (microeconomic) demand side factor that causes the price of a specific good or service to fall. All other options are examples of valid factors that would contribute to lower growth in average prices (inflation) over time (i.e. the effects are macroeconomic in nature). Option A (productivity growth) is an example of an aggregate supply factor that helps*

to reduce inflation or average prices, while options C (confidence levels) and D (economic growth overseas) are examples of aggregate demand factors that help to reduce prices.

Question 13

In terms of the structural component of the budget and the structural component of the current account, which of the following statements is correct?

A. An increase in international competitiveness will tend to reduce the structural component of the current account deficit but have no direct impact on the structural budget deficit

B. An increase in productivity will tend to reduce the structural budget deficit but have no direct impact on the structural component of the current account

C. An increase in the rate of growth in national spending will tend to reduce the structural component of the current account deficit and reduce the structural budget deficit

D. An increase in the rate of unemployment will tend to increase the structural component of the current account deficit and increase the structural budget deficit

The study design requires students to demonstrate an understanding of the effect of discretionary changes in the budget (which represent structural changes to the budget) on the budget outcome (Unit 4 AOS1). It also requires students to understand the (difference between) 'cyclical and structural influences on Australia's current account balance' (Unit 3 AOS3). The 2022 and 2021 Examination Reports reveal that many students confuse the structural component of the budget with the structural component of the current account. In the 2022 examination, students needed 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'. In the 2021 exam, students needed to 'explain how a change in one structural factor might result in improvement in the current account balance'. In both exams, students talked about the structural component of the budget when they needed to talk about the structural component of the current account, or they talked about the structural component of the current account when they needed to talk about the structural component of the budget. Students are advised to revise these parts of the course in order to avoid any confusion in the 2023 examination. ***Option A is the best response*** *because an increase in international competitiveness is typically a structural factor that contributes to long term growth in net export values, which then helps to reduce the current account deficit. However, it does not change the structural budget deficit because this would require a deliberate change to the structure of the budget (i.e. the use of discretionary stabilisers) by the government. [It can however influence the cyclical component of the budget.] Option B is incorrect because changes in productivity do not directly influence the structure of the budget, but they do indeed influence the structural component of the current account. Option C and D are incorrect because growth in national spending and a higher unemployment rate influences the cyclical rather than the structural component of both the budget and the current account.*

Question 14

The temporary reduction in excise tax on fuel, such as that introduced for six months during 2022, will tend to:

A. Increase inflation as people have more disposable income and spend more on goods and services

B. Increase inflation as people have more discretionary income and spend more on goods and services

C. Decrease inflation as costs of production for businesses fall

D. Decrease inflation as households and businesses spend less 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 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. It is for these reasons that ***option C is the best response*** *as it correctly refers to a decrease in inflation and provides an accurate rationale. Option A is incorrect because inflation doesn't increase and because it is not disposable income that is influenced by changes to excise taxes. Option B is incorrect because inflation doesn't increase. Option D is incorrect because the rationale provided for the decline in inflation is invalid.*

Question 15

The income and substitution effect in economics helps to explain why:

A. the demand curve shifts to the right when the price of a good or service falls
B. there is an expansion along the demand curve when the price of a good or service falls
C. there is a contraction along the demand curve when the price of a good or service falls
D. there is an expansion along the supply curve when the price of a good or service rises

Over many years, students have been taught about the income and substitution effects when examining the reasons for a downward sloping demand curve (or the law of demand). However, the new Study Design now includes specific reference to both effects by requiring students to understand 'the law of demand and the theory of the law of demand, including the income effect and the substitution effect'. Students should reasonably expect an examination question to test this knowledge in 2023. ***Option B is the best response*** *because both the income and substitution effects help to explain why a decrease in the price of a good or service will cause demand to increase (i.e.an expansion) purely as a result of the lower price. Option A is incorrect because it describes an increase in demand that occurs for a reason other than a price change. [Students who selected option A are advised to revise the difference between shifts of curves and movements along the curves.] Option C is incorrect because it refers to a contraction along the demand curve. Option D is incorrect because it refers to an expansion along the supply curve.*

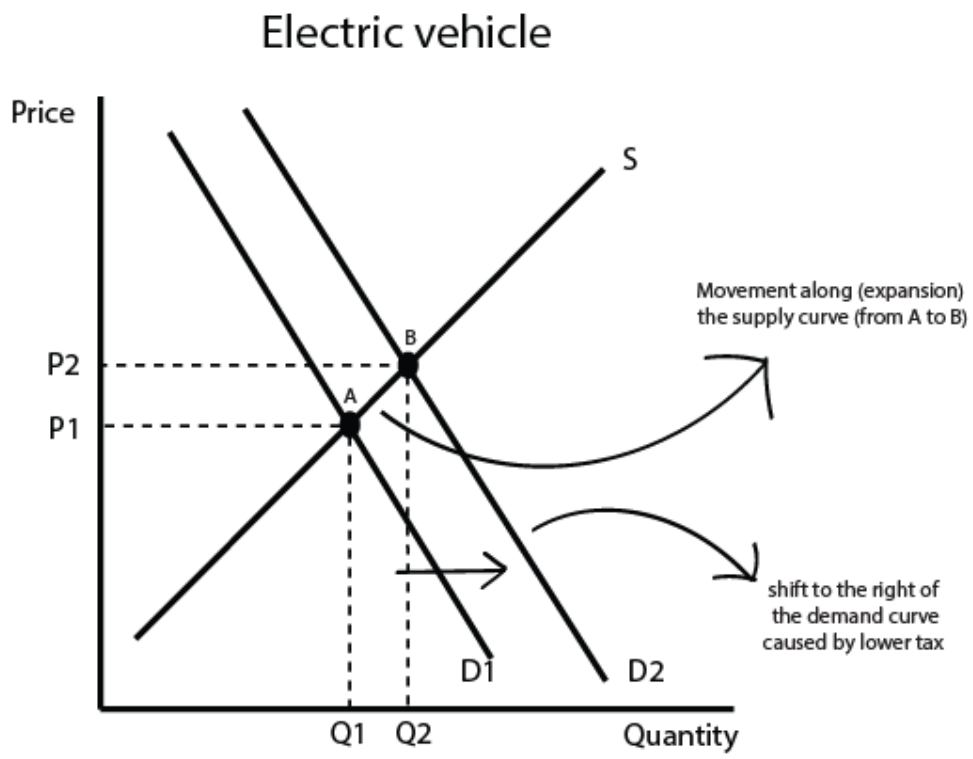
SECTION B

Question 1 (22 marks)

The stage 3 tax cuts were legislated in 2018 and are set to come into effect for the next financial year (2024-25). They will see everyone earning between $45,000 and $200,000 paying 30 per cent in tax and is estimated to result in forgone government revenue of approximately $240 billion over 10 years.

a. Explain how a decrease in personal income tax rates can cause a movement along the supply curve for a good like an electric motor vehicle. In your answer, use the diagram below to illustrate and make reference to the profit motive.

5 marks



- 2 marks for accurate explanation of the movement along the supply curve that includes reference to the demand increasing (independent of price)
- 2 marks for accurate use of a D/S diagram to illustrate, including the shift to the right of the demand curve and illustration of new equilibrium price and quantity
- 1 mark for meaningful reference to the role of the profit motive

Note: There is no need for students to spend excessive time describing the dynamics of adjustment from the old to new equilibrium positions (e.g. there is no need to describe the contraction along the demand curve as the price rises towards its new equilibrium position).

Advice 1: Like the previous (pre-2023) Study Design, the current 2023 Study Design still requires students to demonstrate an understanding of the supply curve, including movements along and shifts of the supply curve. However, the new Study Design now makes specific reference to 'the theory of the law of supply and the profit motive', so students should reasonably expect a question testing this key knowledge, particularly given the advice from the Chief Assessor (see next Advice 2).

Advice 2: In the 2022 examination (Q2, Section A), students struggled to identify that a decrease in personal income tax rates causes a movement 'along the supply curve'. For that MC question, only 39% of students were able to identify that a decrease in personal income tax rates would cause movement along the supply curve for broccoli. This is a common area of difficulty for senior students of Economics and students should be prepared for a question testing this key knowledge. In the External Assessment Report, the Chief Assessor advised that teachers and students should carefully revise the law of supply and the supply curve, including movements along, and shifts of, the supply curve.

Sample answer: *A decrease in personal income tax rates will boost disposable incomes and increase the ability of households to purchase goods and services, including discretionary purchases such as electric vehicles (EVs). This will increase the demand for EVs, shifting the demand curve to the right from D1 to D2. This will initially cause excess demand (shortages) in the market for EVs and encourage producers to raise the price of EVs (e.g. from P1 towards P2) as a means of both rationing demand and maximising profits. As the higher price of EVs results in more profit per unit sold, it incentivises EV producers to release more EVs into the market as they are motivated by profit. This is reflected in the movement along (expansion) the supply curve, resulting in a higher quantity (Q2) sold on markets.*

b. Explain how a government subsidy to producers of electric vehicles (or any other good or service) might lead to a change in relative prices and the allocation of resources.

4 marks

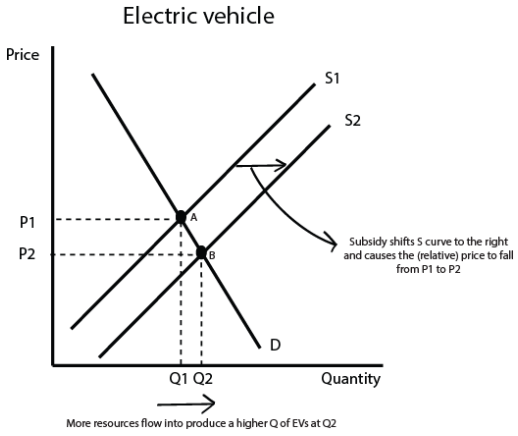
- 1 mark for demonstrating an understanding of government subsidy in the context of the question
- 1 mark for meaningful reference to relative prices
- 2 marks for an explanation for how resources move into the production of EVs (or other good or service selected)

Advice 1: The new Study Design still requires students to demonstrate an understanding of the role of relative prices in the allocation of resources and a key skill introduced to the new Study Design is the requirement to 'analyse how the forces of demand and supply effect equilibrium price and quantity traded'. While this skill was implied in the former Study Design (i.e. construct and interpret demand and supply diagrams), the explicit reference to the need to 'analyse' lends itself to a question that uses this specific command term. Students should expect a question to appear on the 2023 exam relating to this key knowledge and/or key skill.

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. It is an area of VCE Economics that consistently troubles students and past examination performances reveal that students fail to demonstrate an adequate understanding of this part of the course, 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 require the use of a D/S diagram, there is no problems for students to include one, 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 subsidy to EV producers will reduce the costs of producing EVs and encourage EV producers to reduce the price of EVs as a means of generating additional sales. The price of EVs will therefore fall relative to substitute motor vehicles (e.g. petrol fueled vehicles) which then leads to an increase in demand for EVs and a decrease in demand for substitute vehicles. As a greater volume of EVs will be produced over time relative to substitute vehicles, it results in resources, such as labour and capital, moving away from the production of petrol fueled vehicles and towards the production of EVs. [This can be illustrated with reference to the D/S diagram below, with the subsidy shifting the supply curve to the right, which reduces the (relative) price of EVs and leads to an expansion of demand (point A to B), and higher quantity produced (Q1 to Q2). This necessarily requires more resources to produce the additional quantity at Q2.]*



Note: Square bracketed section, including the diagram is not required for full marks.

c. Making reference to 'market failure', outline a rationale for the provision of a subsidy to producers of electric vehicles (or any other good or service).

4 marks

- 1 mark for identification of a relevant market failure
- 1 mark for identifying a relevant reason/rationale
- 2 marks for a meaningful outline of the reason that is clearly linked to the relevant market failure

Advice 1: The new Study Design (U3 AOS 1) still 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). Most recently, 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 1.4/4. 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 2: 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 proved to be problematic for some students in the 2017 exam when being asked to distinguish public goods from common access resources. In relation to the other two exams testing this part of the course, the 2020 exam included a 4 mark question that asked students to 'describe one strength and one weakness associated with the use of the market to allocate resources'. While the average score of 2.4/4 (60%) was reasonable, only 32% of students achieved full marks. A common problem when describing a strength was that students simply described how markets work to allocate resources. In relation to weaknesses, the best students were able to make a direct link to market failures. 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 only high performing students tackle asymmetric information.

Sample answer: *Governments will typically provide subsidies to encourage the production of those goods and services that are considered 'merit goods', and/or goods/services whose production or consumption results in positive*

externalities for society. Governments do this because they recognise that without government intervention via the provision of incentives to economic agents (such as subsidies to producers in this case), the market will underallocate resources to the production of these goods/services, and a socially optimal allocation of resources will not be achieved. In this respect, in the presence of positive externalities that are attached to the consumption of EVs (e.g. the benefits to the environment via reduced Co2 emissions) results in market failure because the social or third party benefits are not taken into account by the market and EVs will be 'underproduced' from a societal point of view. The provision of subsidies is one tool that governments use to internalise the third party benefits [or internalise the social costs] by making it more affordable for producers to supply EVs to markets.

Note: a student might prefer to argue from the point of view that subsidies to EV producers help to address market failure by encouraging resources away from the production of those goods/services creating negative externalities (e.g. emissions from petrol powered vehicles). This is an equally valid approach and is deserving of full marks.

d. Examine how the provision of a government subsidy (or any other government intervention) has unintentionally led to a decrease in efficiency.

4 marks

- 1 mark for identifying an unintended consequence of the subsidy (or government intervention)
- 1 mark for demonstrating an understanding of efficiency in the allocation of resources
- 2 marks for an accurate description of how the allocation of resources in the economy has become less efficient as a result of the government intervention

Note: Students are free to focus on any relevant government intervention in the context of the question. It is no longer necessary for the intervention to be 'contemporary' (e.g. over the past few years), which was a requirement of the former Study Design (2017-2022).

Advice 1: The current Study Design requires students to have knowledge of one example of government intervention in markets that unintentionally leads to a decrease in one of allocative, productive, dynamic or intertemporal efficiency. This key knowledge was assessed only twice during the life of the previous Study Design, first in 2017 (Q1c) and again in 2022 (Q4d). In both instances, the question was basically a repeat of the key knowledge point from the Study Design, which deliberately gave students scope and choice to focus on any example they had covered during the year. Importantly, only 36% of students achieved full marks for that question in 2017 and only 25% in 2022, with the majority of students demonstrating an inability to move beyond a discussion of the unintended consequence. It is important that students are prepared to make the concrete link to at least one type of economic efficiency in order to achieve full marks. Indeed, this point was made in the 2022 Examination Report, where students were advised 'to identify a relevant form of government intervention in markets and then explain how the intervention leads to a reduction in at least one type of economic efficiency'.

Advice 2: Technically, the Study Design requires students to think in terms of government failure in the sense that the government intervention led to a 'net' reduction in economic efficiency. Higher order responses will be those that attempt to make this argument. For example, in relation to subsidies provided to private vocational colleges (or subsidies provided to industries more generally), allocative efficiency would be impaired if it could be shown that the benefits of the subsidies are outweighed by the costs in terms of the rorting, waste and/or inefficiencies that become entrenched. However, full marks can still be achieved in the event that students do not extend their analysis this far.

Sample answer: *The provision of the federal government's wage subsidy over 2020-21 (referred to as JobKeeper) was designed to protect employment and incomes in the economy by easing the financial labour cost burden facing many employers impacted by the COVID-induced recession. A $750 per week wage subsidy payment per employee was provided to employers for a temporary period, provided they could show that they suffered a 30% reduction in revenue for the month of March 2020. While the subsidy clearly supported many businesses and workers in need of support, there were numerous examples of other businesses receiving ongoing support despite revenue (and profits) picking up substantially from April 2020 and therefore not in need of ongoing support. The provision of huge subsidies to some large employers (e.g. Harvey Norman) came at an excessive opportunity cost [given that their profits increased over the period] as the funds could have been better used to provide (additional) support to other businesses who were genuinely struggling over the entire period [such as travel agents]. In this respect, parts of the total amount provided in wage subsidy support reduced the efficiency in the allocation of resources given that opportunity costs were not minimised and valuable taxpayer funds could have been used to achieve a more allocatively efficient outcome where only the genuinely needy employers were provided with support*

e. Outline why tax cuts are expected to increase the budget deficit and describe one way that the government can finance a budget deficit.

3 marks

- 1 mark for an accurate outline of how the tax cuts are expected to increase the deficit
- 1 mark for identifying an appropriate means of financing a deficit
- 1 mark added value/description of the means of financing a deficit

Advice: The current Study Design still requires students to know the methods of financing a deficit or utilising a surplus and this continues to be an area of the course that troubles some students. In particular, students will often err by referring to an increase in taxes and/or a reduction in expenditure as means of financing a deficit. For example, in the 2022 examination (Q7, Section A), only 39% of students were able to identify that the sale of bonds (to foreign companies) was the only means of financing a budget deficit when compared to other options listed in the question (i.e. reducing welfare spending and increasing company tax rates). In the External Assessment Report, the Chief Assessor advised that teachers and students should carefully revise the means by which governments may finance a deficit or utilise a surplus. It was emphasised that an increase in company tax rates and a reduction in welfare payments are not means of 'financing a budget deficit', but rather ways of reducing the size of the deficit (in the future). This is a common misconception and one that students should pay attention to in the event that a question resurfaces on the examination in either Section A or B.

Sample answer: *The tax cuts should increase the size of the budget deficit given that they will involve the government foregoing income tax revenue, which results in a decrease in government revenue relative to government expenditure, and increases the size of the budget deficit. The government can finance the deficit by issuing (i.e. selling) Australian Government Securities (AGS), which are also known as Commonwealth Government Securities (CGS), or government bonds. This means that the government will be borrowing money from investors (lenders), some of whom will be Australian residents [e.g. large institutions] and others foreign residents [e.g. foreign institutions] as the money is received by the government in exchange for the bonds/securities.*

Note 1: While it can be argued that tax cuts have the potential to reduce the deficit over time, students who proceed down this path should not be rewarded for the first mark as the question directs them to focus on the link between tax cuts (forgone revenue) and a higher deficit.

The underlying budget outcome is expected to move from an estimated surplus of $4.2 billion for 2022-23 to an estimated deficit of $13.9 billion for 2023-24.

f. Outline what the estimated $13.9 billion budget deficit for 2023-24 suggests about the budgetary policy stance.

2 marks

- 1 mark for Identifying that the stance of budgetary policy is likely to be expansionary.
- 1 mark for an accurate justification/outline of why a deficit is expansionary

Advice 1: The new 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 deficit can either be expansionary or contractionary depending on the interplay between structural and cyclical changes to the budget), a 2 mark question such as this only requires a simple outline. Students could focus on the fact that government expenditure exceeding government revenue implies a net injection into the economy from the federal government which simulates economic growth. Alternatively, they could focus on the movement in the budget outcome from the previous year 2022-23 (which is an estimated surplus of $4.2 billion) with an increased deficit (or move from surplus to deficit) suggesting that the government is making a net stimulus to economic activity 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 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). Students are advised to revise this part of the course.

Sample answer: *The estimated $13.9 billion budget deficit for 2023-24 suggests that the stance of budgetary policy is expansionary. This is because government expenditure exceeds government revenue and means that there is a net injection into the economy from the federal government, which stimulates AD and economic growth. [The increase in the size of the budget deficit, or change from an estimated surplus of $4.2 billion in 2022-23 , also supports the case that budget estimated $13.9 billion budget deficit implies an expansionary stance given that the government is increasing government expenditure relative to government revenue which increases the net stimulus to economic activity from the federal government.]*

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

Question 2 (14 marks)

a. Evaluate the extent to which the government has achieved its macroeconomic goals over the past year.

6 marks

- 1 mark for demonstrating an accurate understanding of the goal of price stability
- 1 mark for demonstrating an accurate understanding of the goal of strong and sustainable economic growth
- 1 mark for demonstrating an accurate understanding of the goal of full employment
- 0.5 mark for demonstrating general/broad knowledge of the rate of inflation over the past year
- 0.5 mark for demonstrating general/broad knowledge of the rate of unemployment over the past year
- 0.5 mark for demonstrating general/broad knowledge of the rate of economic growth over the past year
- 0.5 mark for comparing the inflation rate to the goal and determining the extent to which price stability was achieved
- 0.5 mark for comparing the unemployment rate to the goal and determining the extent to which full employment was achieved
- 0.5 mark for comparing the rate of economic growth to the goal and determining the extent to which strong and sustainable economic growth was achieved

Or

- 3 marks for demonstrating an accurate understanding of the goals of price stability/SSEG and FE
- 1.5 marks for demonstrating general/broad knowledge of the key statistic underpinning the relevant goals (inflation/unemployment rate/economic growth) over the past year
- 1.5 marks for comparing the key statistic underpinning the relevant goals to the goals

Note: in the event that the marks awarded for a student response amount to a non-whole number/fraction (e.g. 0.5, 1.5, 2.5, 3.5, 4.5 or 5.5), then the score should be rounded up.

Advice 1: The new 2023 Study Design has included a new key skill: *'evaluate the extent to which the economy has achieved the domestic macroeconomic goals over the past two years'*. Despite this skill not being present in the former Study Design, it was tested somewhat on past exams. Students were presented with charts/graphs containing the movement of key macroeconomic variables over a number of years. They were then asked to assess the extent to which Australia achieved specific macroeconomic goals based on the information contained in the charts. For example, in the 2017 exam, Q4a presented a chart showing the quarterly and annual growth in the CPI, and students were asked to assess the extent to which the goal of low inflation (price stability) was achieved. In the 2018 exam, Q4a presented students with charts relating to the unemployment and underemployment rates, as well as the rate of GDP growth and they were asked to assess the extent to which the full employment and strong and sustainable economic growth goals were achieved. Overall, these should have been relatively easy questions, requiring students to demonstrate an understanding of the relevant goal(s) and then simply compare the relevant data/statistics contained in the chart(s) to the key statistic that underpins the achievement of the goal(s), 2-3% growth in the CPI on average over time in the case of price stability, approximately 3 ½% for strong and sustainable economic growth, and approximately 5% for the rate of unemployment (now revised down to 4.25%). A number of students were unable to perform well in these questions, with only 26% of students achieving full marks in 2018 and 36% achieving full marks in 2017. Given that a similar question has not surfaced on an exam since then, it would not be surprising to see one appear on the 2023 exam given the presence of the new key skill.

Advice 2: In the current climate, it would be advantageous for students to demonstrate an understanding of contemporary thinking related to the full employment goal. The Reserve Bank of Australia (RBA) and Treasury released research that suggested the full employment rate of unemployment, or the Non-Accelerating Inflation Rate of Unemployment (NAIRU), is likely to reside at approximately 4.25%. Given that unemployment has remained around 3.5% it has prompted many commentators/economists to suggest that the new NAIRU is even below 4%. For the purposes of the VCE Economics exam, the precise level of NAIRU is less important than what is meant by NAIRU, what it implies about the economy, and the implications it might have for the setting of government policies.

Advice 3: The VCAA list of command terms reveals that the directive to 'evaluate' requires students to 'ascertain the value or amount of; *make a judgment using the information supplied*, criteria and/or own knowledge and understanding to consider a logical argument and/or supporting evidence for and against different points, arguments, concepts, processes, opinions or other information. Ordinarily, when presented with this task word in a question, students should think about the possible arguments for and against or advantages vs disadvantages before coming to an overall conclusion. For example, if the question asked to 'evaluate the extent to which full employment has been achieved', with a mark allocation of 4 or more marks, there is scope for students to consider both sides of the argument given that one could argue that full employment has not been achieved given that unemployment is too low (and inflationary). However, in the context of the current question, with 6 marks allocated for an assessment of three macroeconomic goals, this level of depth would not be necessary to achieve full marks. The full list of VCAA command terms can be downloaded at the VCAA website at www.vcaa.vic.edu.au/assessment/vce-assessment/Pages/GlossaryofCommandTerms.aspx]

Sample answer: *Full employment represents the government's goal to achieve maximum employment (growth) in the economy such that unemployment, or the unemployment rate, is at its lowest possible level before inflationary pressures become excessive. This is often referred to as the non-accelerating inflation rate of unemployment or NAIRU, which is currently considered to be approximately 4.25% (but it may be lower). Given that the unemployment rate has remained below 4% over the past year, hovering around 3.5%, it suggests that full employment has indeed been achieved (or even overachieved). [However, to the extent that the rate of unemployment is indeed below NAIRU, one could also argue that the goal is not achieved given that the excessive inflation it triggers can be a detriment to the economy.]*

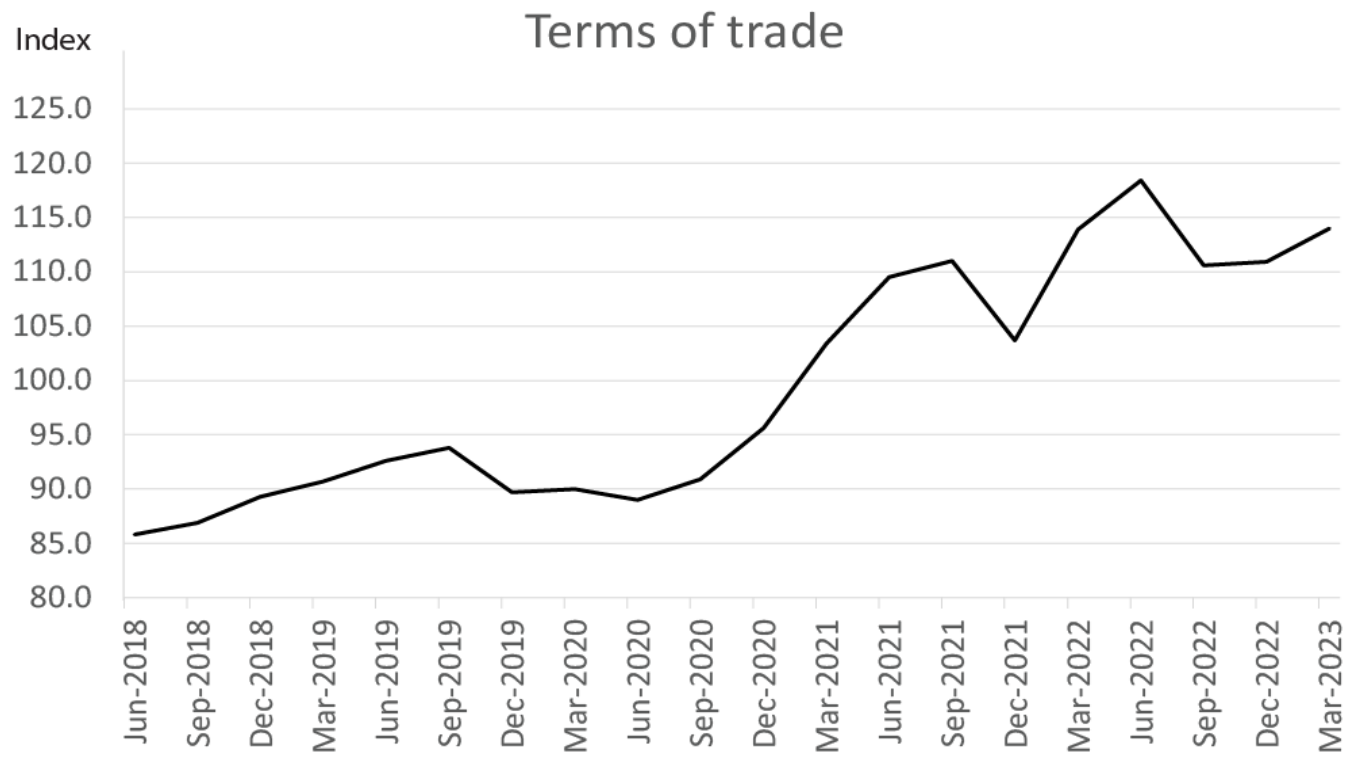
The goal of low and stable inflation (also referred to as price stability) requires the rate of growth in consumer prices (i.e. headline inflation) to be within the 2-3% range on average over time. Given that the rate of (headline) inflation has risen well above the top end of the RBA's target range of 2-3% over the past 12 months [to as high as 7.8% for the year ended December 2022], it is fair to say that the goal has not been achieved.

The goal of strong and sustainable economic growth requires that the rate of growth in real GDP is strong enough to create jobs and boost material living standards (e.g. above 3%) but not so strong that it triggers excessive inflation and/or leads to excessive pressures on the environment and/or results in excessive external pressures. Over the past 12 months, given that the annual rate of economic growth has been below 3% [or precisely 2.3% for the year ended 31 March 2023], it is fair to say that the goal has not been achieved given that growth is insufficient (despite being sustainable).

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

b. Define the terms of trade (TOT) and describe the trend movement in the TOT over the past three years.

4 marks



- 2 marks for an accurate definition
- 1 mark for an accurate description of the trend from March 2020 (i.e. an increased trend since March 2020)
- 1 mark for accurate use of the data from the chart

Advice 1: The Study Design requires students to demonstrate an understanding of the terms of trade, both its meaning and how it is measured, as well as both the causes and effects of movements in the terms of trade. Questions related to the terms of trade, either definition or the causes/effects, regularly cause students problems in examinations. Students will typically confuse the terms of trade with the trade weighted index (TWI); the terms of trade with the balance of trade (or BOMT) and/or inappropriately define the terms of trade as the value of exports over the value of imports (or even 'exports over imports'). As noted in a recent Examination Report, 'Students need to remember that growth in the TOT means that the prices received for exports are increasing relative to the prices paid for imports and it does not refer to exports over imports; or the value of exports over the value of imports; or the price of imports over the price of exports.'

Advice 2: In relation to the description of the trend, these types of questions are often asked in the examination and relate to the key skill: *'explain and interpret trends and patterns in economic data and other information'*. The marks allocated for these questions (or parts of questions) will usually be 2 marks, with 1 mark for an indication of the trend movement in the relevant variable (e.g. an increase in the TOT since March 2020) and 1 mark for an accurate use of the data/information contained in the chart. It is common for students to err by referring to a period outside that referred to in the question; to spend too much time examining the rises and falls in the relevant variable over the given time period; or including irrelevant information such as the causes or effects of the movement in the relevant variable. Accordingly, students should expect 2 marks to be allocated for the description of the trend and this should guide students in terms of the depth required in the response (e.g. students should not waste time in this question by writing about the causes of the upward trend in the TOT).

Sample answer: *The TOT is defined as the average prices received for exports relative to the average prices paid for imports and is derived by dividing the export price index by the import price index. [The TOT provides an indication of the volume of imports that can be purchased from any given volume of exports.] The TOT has trended upwards over the relevant period, from an index of 90 in March 2020 an index of approximately 115 in March 2023.*

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

c. Explain why the movement in the terms of trade (TOT) has contributed to the delivery of a restrictive stance of monetary policy.

4 marks

- 1 mark for accurately linking a higher TOT to an increase in AD/inflation
- 2 marks for accurately linking the higher inflation to a higher cash rate (tightening of monetary policy)
- 1 mark for demonstrating an understanding of a restrictive stance of monetary policy

Advice 1: The Study Design requires students to demonstrate an understanding of the causes and effects of movements in the TOT. With respect to the effects, the Study Design specifically mentions the effects on the domestic macroeconomic goals and living standards. As noted in the advice provided for the previous question, students will often experience difficulty unpacking the causes and/or effects of a change in the TOT. They will be awarded zero marks in the event that they discuss the causes of a change in the TOT when they are asked to unpack the effects; or if they discuss the effects of a change in the TOT when they are asked to unpack the causes. It should be reasonably clear that the current question relates to the effects of the higher TOT. In particular, the effects on AD, economic growth, the achievement of price stability and the RBA's response.

Advice 2: A new key skill in the Study Design is the requirement to analyse the effect of current factors on the setting of aggregate demand policies and living standards. Students should development an awareness of a range of factors influencing RBA decision making over the past couple of years, including the relatively strong terms of trade (or high commodity prices) and a host of other factors that have been influencing inflationary pressures and the achievement of price stability, such as wages growth, overseas rates of growth, confidence levels, capacity utilisation, economic growth, productivity growth, global conflict, savings and of course employment growth and unemployment levels. Also refer to the Advice provided in Question 3b below.

Advice 3: The current Study Design requires students to demonstrate an understanding of the stance of monetary policy: expansionary (accommodative), contractionary (restrictive) or neutral. Students should be careful not to confuse cause and effect when asked about the stance of policies. In particular, it is common for students to write about the effects of a given stance on the economy when they are asked to comment on the factors influencing the stance (as in the current question). For example, Q1e of the 2022 Exam required students to explain how movements in Australia's inflation rate and the unemployment rate may have influenced the stance of monetary policy. Less than a third of students attained the full 4 marks, as many students misread the question and focused on how the less expansionary stance (over 2022) actually helped to reduce AD and inflationary pressures (and increase the unemployment rate). Instead, students needed to clarify how the MP stance became less expansionary over the course of 2022 (i.e. via a MP tightening/increase in interest rates); and how the combination of high inflation and a low unemployment rate influenced the RBA to adopt a less expansionary setting.

Advice 4: Students should also learn from the mistakes made by former students. For example, in the 2020 examination, some students erred by arguing that a 'favourable' movement in the TOT required that the TOT index increases above 100. Students should recognise that a favourable movement in the TOT only requires that the index increases from one period to the next, which is the case for the three year period 2020 - 2023 .

Sample answer: *The recent increase in the TOT has occurred primarily because of higher commodity prices, which has resulted in higher export values and higher incomes received by commodity exporters (typically mining companies). These higher incomes then flowed through the economy and ultimately contributed to an increase in AD and an increase in the rate of inflation well above the RBA's 2-3% target range. In response, the RBA decided to tighten monetary policy by raising the target cash rate [and interest rates more generally] in order to reduce AD and return inflation back into the target range. The progressive tightening of monetary policy over 2022-23, with the cash rate climbing to 4.1%, well above what is generally considered the neutral rate of approximately 3.5%, ensured that monetary policy became restrictive, restraining growth in AD and inflation and helping to return the rate of inflation back into the target range.*

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

Question 3 (17 marks)

a. Define the non-accelerating inflation rate of unemployment (NAIRU)

2 marks

- 1 mark for a superficial definition (e.g. the rate that is consistent with full employment/the natural rate of unemployment) or
- 2 marks for a more comprehensive definition

Advice: The current (and former) study designs require students to define key economic concepts and terms and use them appropriately. In relation to the NAIRU, this concept has not been specifically referred to in Section B of a VCE Examination. However, it is now prescribed key knowledge in the new Study Design and it is reasonable to expect some reference to the NAIRU on the examination, either its meaning or its policy implications.

Sample answer: *The Non-Accelerating Inflation Rate of Unemployment is defined as that rate of unemployment, below which [wages growth and] inflation becomes excessive. It is generally considered to occur at a rate of unemployment of approximately 4.25%. [In other words, the NAIRU is the lowest rate of unemployment that can be achieved in the economy before wages growth and inflation begin to accelerate to unacceptable levels. The NAIRU is commonly considered to be the rate of unemployment that is consistent with the achievement of full employment.]*

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

b. Explain the implications for each of the following if the rate of unemployment falls below the NAIRU:

i. monetary policy settings

ii. the cyclical component of the budget

5 marks

- 0.5 mark for identifying that monetary policy settings are likely to become more restrictive (or less expansionary)
- 0.5 mark for identifying that there is likely to be a cyclical improvement to the budget
- 2 marks for an accurate explanation for why monetary policy settings become more restrictive/less expansionary
- 2 marks for an accurate explanation for why there is likely to be a cyclical improvement to the budget

Note: In the event that the marks awarded for a student response amount to a non-whole number/fraction (e.g. 0.5, 1.5, 2.5, 3.5, or 4.5), then the score should be rounded up.

Advice 1: A key skill in the current Study Design requires students to analyse the effect of current factors on the setting of aggregate demand policies and these types of questions often appear on the exam. This includes the 2022 exam, where Q1e required students to 'explain how movements in Australia's inflation rate and the unemployment rate may have influenced the stance of monetary policy since January 2022'. As noted in the advice for Question 2c above, less than a third of students attained the full 4 marks, with a number of students misreading the question and focusing on how the less expansionary stance actually helped to reduce AD/inflationary pressures and increase the unemployment rate. In other words, they erred by focusing exclusively on the transmission mechanism.

Advice 2: In relation to the NAIRU, there has been much talk over the course of 2022-23 in relation to the precise location of the NAIRU and its implications for monetary policy settings. As such, students can reasonably expect a question on the examination that requires them to demonstrate not only an understanding of what is meant by the NAIRU and how the perception that Australia's unemployment rate is currently below NAIRU has influenced the RBA to tighten monetary policy and adopt a restrictive monetary policy stance.

Advice 3: In relation to the impact on the budget, the question is similar to those that regularly appear on the examination, where students have been required to demonstrate an understanding of automatic stabilisers/cyclical component of the budget. To achieve full marks students, simply need to connect a lower unemployment rate with a reduction in the budget deficit (or rise in a budget surplus). It is not necessary for students to highlight the budgetary impact stemming from the inflationary effects of the rate of unemployment falling below the NAIRU. However, this can add value to a student's response (e.g. reference to higher inflation and higher wages growth contributing to growth in government tax revenue via bracket creep).

Advice 4: The most recent four examinations (2019 - 2022) tested student understanding of the role of automatic stabilisers, and on all occasions, students performed relatively poorly. In the case of the 2022 exam, the average score was a relatively low 50% and only 21% of students achieved the full 4 marks. Question 2b required students to explain how automatic stabilisers affected the Australian Government's budget outcome for 2021–22. Unfortunately, many students erred by arguing that automatic stabilisers are changes 'in the economy' that occur without government intervention, without specifically linking this to the budget or the budget outcome. In addition, many students did not stay focused on the 2021-22 Budget as specified in the question. In relation to the 2021 exam, students were required to 'explain the difference between the role of automatic stabilisers and discretionary stabilisers in influencing aggregate demand and stabilising the business cycle' (8 marks). The average score was 55%, with only 8% of students achieving the full 8 marks. Importantly, many students erred by simply defining automatic and discretionary stabilisers without isolating a key point of difference between the two terms in relation to how they operated to support aggregate demand and stabilise the business cycle. Other problems included references to lower tax rates and lower interest rates when attempting to explain how automatic stabilisers operate, as well as a propensity to explain how these stabilisers operate in a theoretical setting, rather than the context of 'the past two years' as specified in the question.

Sample answer: *If the rate of unemployment rate falls below the NAIRU it will be reflective of a very tight labour market, with a high rate of job vacancies relative to the supply of labour and the existence of widespread labour shortages. In this environment, upward pressure is exerted on the price of labour and employers are forced to raise wages in order to attract staff. This adds to costs of production, results in higher prices and, by definition, leads to an unacceptable increase in the rate of inflation, one that is beyond the RBA's target of 2-3% on average over time. In order to reduce inflation back into the target range (i.e. to achieve price stability), the RBA will typically tighten monetary policy in order to achieve a more restrictive (or less expansionary) monetary policy stance. The resulting higher cash rate/interest rates will then help to restrain growth in aggregate demand and help to reduce demand inflationary pressures.*

The lower unemployment rate (below NAIRU) will tend to reduce the cyclical budget deficit. This is because lower unemployment rates should automatically result in reduced levels of government expenditure on income support [e.g. less spending on unemployment benefits] as well as higher levels of income tax revenue (as more people are likely to be employed and earning a taxable income). This results in a cyclical (automatic) increase in government revenue relative to government expenditure, causing the budget deficit to fall. [This is often characterised as an improvement to the budget due to the operation of automatic stabilisers].

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

c. Describe one change to the structural component of the budget that has been implemented by the federal government over the past two years and analyse how it might help to raise productivity, boost international competitiveness and raise living standards.

5 marks

- 1 mark for an identification of a relevant discretionary stabiliser (i.e. change to the structural component of the budget)
- 1 mark for further detail describing the initiative
- 1 mark for accurately linking the initiative to a rise in productivity
- 1 mark accurately linking the initiative (or the rise in productivity) to an increase in international competitiveness
- 1 mark accurately linking the initiative (or the rise in productivity/international competitiveness) to an increase in living standards

Note: Students are free to select any discretionary initiative from recent budgets, but their analysis must be supply side focused. In the event that a student focuses on a (aggregate) demand side explanation to arrive at an increase in living standards, then a maximum of 2 marks should be awarded.

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) components of the budget. First, students should be aware that the cyclical components of the budget refer to automatic stabilisers and the structural components of the budget refer to discretionary stabilisers. Importantly, students need to remember that automatic/discretionary stabilisers can be examined from two angles. First, the impact that they can have on the budget outcome and second, the impact that they can have on the economy (e.g. the impact on aggregate demand 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 2: Question 2c of the 2022 exam required students 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'. While students were expected to explain a budgetary policy initiative that was designed to 'stimulate AD', it was acceptable to refer to budgetary policy supply-side initiatives so long as the explanation of the supply-side initiatives included reference to the influence on AD (e.g. the reduction in prices and the increase in international competitiveness and net export demand). However, for the current question, students need to remain focused on supply side initiatives delivered through the budget and follow through the impact on productivity, international competitiveness, and living standards. It would be a mistake to write about a discretionary stabiliser that helps to lift living standards on the (aggregate) demand side of the economy. For example, referring to lower income tax rates and its ability to boost disposable income and living standards without any attempt to show how lower income tax rates might increase labour productivity, lift international competitiveness and raise living standards.

Advice 3: It is common for students to confuse the structural component of the budget with the structural component of the current account (deficit). This was once again a problem for those students completing Q2c of the 2022 examination, where they referred to events like a decrease in the savings and investment imbalance helping to improve the current account balance. It also common for students to demonstrate an insufficient understanding of productivity, with many confusing productivity with production (which was once again the case in the 2022 exam) or describing productivity in vague or imprecise terms (such as 'production increasing from resources', 'a greater ability to produce' or 'producing goods more quickly'.

Sample answer: *An increase in infrastructure investment over recent budgets, such as spending on the suburban Rail Loop East in Melbourne and the Bruce Highway, as well as additional spending or investment on telecommunications infrastructure (including further investment in the NBN Co) is likely to improve international competitiveness and improve living standards. With an increase in both the quantity and quality of the nation's productive assets, such as infrastructure, the willingness and ability of the business sector to produce and supply goods and services to markets will increase. For example, better quality road infrastructure will help to raise the efficiency/speed with which goods and services can move through the economy [e.g. between buyers/consumers and sellers/producers]. Similarly, better quality ports facilitate a speedier transportation of exports to foreign markets, as well as faster access to capital/intermediate imports, which ultimately improves productivity (output per unit of inputs) and helps to reduce average costs of production. This both increases aggregate supply/productive capacity and maintains downward pressure on prices and inflation, which then helps to boost international competitiveness, as domestic producers are in a better position to compete on price (and quality) in the global market place. This helps to boost the rate of growth in real GDP (economic growth) and raises material living standards of Australians as the ability to purchase goods and services increases (as measured by real GDP per capita).*

d. Analyse the effects of one market-based environmental policy on Australian living standards. In your answer, refer to the possible short-term and long-term impacts.

5 mark

- 1 mark for the identification of one market based environmental policy
- 1 mark for additional information describing the nature of the environmental policy
- 1.5 mark for a logical connection to a negative short term impact on living standards
- 1.5 mark for a logical connection to a negative long term impact on living standards

Note: in the event that the marks awarded for a student response amount to a non-whole number/fraction (e.g. 0.5, 1.5, 2.5, 3.5, 4.5 or 5.5), then the score should be rounded up.

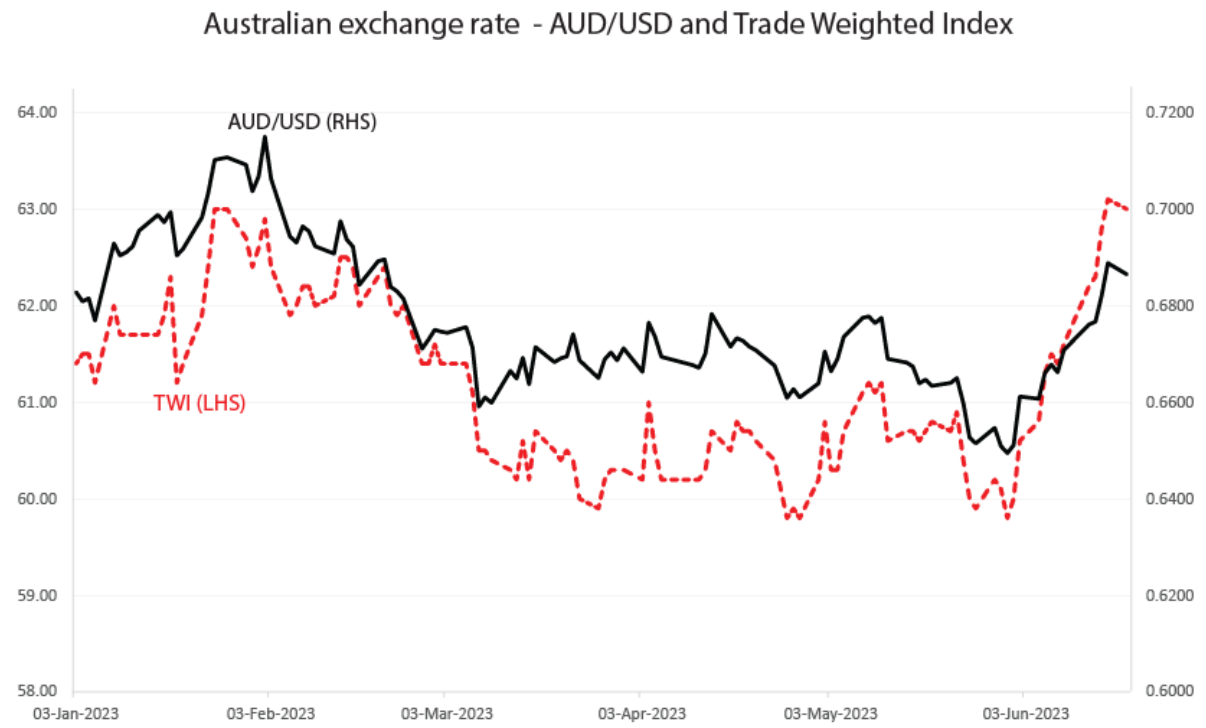
Advice 1: A new key knowledge point introduced into the Study Design is the requirement for students to demonstrate an understanding of one market-based environmental policy and its short-term and long-term effects on aggregate supply, intertemporal efficiency and living standards. Students are not required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

Advice 2: The VCAA defines the command term 'analyse' in the following way: identify components/elements and the significance of the relationship between them; draw out and relate implications; determine logic and reasonableness of information. In the context of the current question, this requires students to write about the relationship between the policy and Australian living standards and to draw out the implications for living standards in both the short term and long term.

Sample answer: *In the long run, the introduction of a price on carbon, via either a carbon tax or an emissions trading scheme, should result in a reallocation of resources away from carbon intensive production methods [such as coal fired electricity] and towards cleaner or greener production methods [such as solar energy]. To the extent that this helps to address climate change and the associated destruction to the nation's productive assets in the future (via a reduced incidence of natural disasters for example), the price of carbon helps to protect the nation's productive capacity (or aggregate supply) in the long run and preserve Australian living standards – living standards that would otherwise be compromised in the absence of environmental policies designed to address excessive carbon emissions. This includes reduced access to goods and services in the future and a more volatile natural environment. However, in the short term, the pricing of carbon will tend to increase the costs of production for those businesses relying on 'carbon intensive' production methods. This increases prices [e.g. electricity prices] and inflation, which in turn leads to a reduction in AD, as Australia's international competitiveness is eroded, and some businesses scale down investment and potentially relocate overseas. The reduced level of AD results in a lower level of GDP per capita, negatively impacting on material living standards. [Households will also suffer more directly in the short term as a result of higher energy prices which reduce purchasing power, access to goods services and material standards of living.]*

Note: Square bracketed section is not required for full marks

Question 4 (12 marks)



a. Interpret the above chart to provide evidence supporting the claim that the Australian exchange rate has depreciated since February 2023.

2 marks

- 1 mark for accurately interpreting the chart by contending that the exchange rate has depreciated since February if we focus on the AUD/USD exchange rate
- 1 mark for using the data from the chart to support the contention

Note 1: in the event that a student asserts that the exchange rate has depreciated but then focuses on the movement in the trade weighted index (e.g. between February and April) then a maximum of 1 mark should be awarded.

Advice 1: The study design requires students to explain and interpret trends and patterns in economic data and other information. Students should always be careful analysing graphs or charts with double Y axes such as that presented in this question. There have been examples of students in past examinations making the mistake of reading off the wrong axis. For example, some students will make the mistake of saying that the AUD/USD exchange rate has fallen from approximately 0.64USD to approximately 0.62USD, reading off the LHS axis when they should be reading off the RHS axis.

Sample answer: *The Australian exchange rate has depreciated against the US dollar since February 2023, falling from approximately 0.71.5USD in February 2023 to approximately 0.68.5USD in July 2023. [However this is not true in relation to the value of the Australian dollar as measured against a weighted basket of foreign currencies, given that Australia's TWI has neither depreciated or appreciated since February 2023 – i.e. starting and ending with an index of 63.]*

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

b. Explain how a decrease in Australia's credit rating from its relatively high AAA level might influence Australia's exchange rate.

3 marks

- 1 mark for identifying that the exchange rate is likely to depreciate
- 1 mark for demonstrating an understanding of what is meant by Australia's credit rating
- 1 mark for a logical link between a lower credit rating and a lower exchange rate

Advice 1: The new Study Design requires to demonstrate an understanding of 'the exchange rate, its meaning and measurement and the factors affecting its value, including relative interest rates, commodity prices and the terms of trade, demand for exports and imports, foreign investment, relative rates of inflation, credit ratings and speculation'. While students have always been required to be aware of the factors influencing the exchange rate, 'credit ratings and speculation' are new inclusions to the list of factors.

Advice 2: It is worth remembering that the major drivers of a change in the exchange rate are changes in the interest rate differential and changes in the terms of trade. Given that no question examining either the causes or effects of a change in the exchange rate appeared in Section B of the 2022 and 2021 examinations, it is perhaps likely that students will be required to demonstrate an understanding of one or both in the 2023 examination.

Advice 3: 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. For example, in the 2020 exam, the first three questions (1a-1c), worth a total of 16 marks, related to either the cause (1a and 1b) or effects (1c) of a changing 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 relation to Q1b (2020), students needed to explain how a more favourable terms of trade (and a slowdown in global economic growth) would influence the exchange rate. As noted in the Examination Report, many students were unable to understand the role of the terms of trade as a driver of changes in the exchange rate. In the context of the current question, students should ensure that they do not examine how a change in the exchange rate influences Australia's credit rating.

Sample answer: *A lower credit rating for Australia is likely to contribute to an exchange rate depreciation. This is because a lower credit rating for a country reflects a higher risk attached to investment in that country [e.g. there is a higher risk of Australian borrowers defaulting on their debt] which makes other destinations relatively less risky options for foreign investors [or foreign currency speculators]. This results in capital outflow [and reduced capital inflow] as investment funds leave the country in search of alternative, less risky, investment destinations where credit ratings are relatively higher. This increases the supply of AUD on foreign exchange markets which leads to a lower price of the AUD (i.e. a lower exchange rate).*

c. Explain why a depreciation of the Australian exchange rate might contribute to lower growth in Net Foreign Debt (NFD). In your answer, refer to the current account balance.

3 marks

- 1 mark logical reference to the current account balance and demonstration of an understanding of NFD
- 2 marks for an accurate explanation of the link between a depreciating exchange rate and a lower level (or rate of growth) in NFD

Advice 1: As noted in the advice to the previous question, students need to understand the causes and effects of a change in the exchange rate and it is important not to confuse the two. Students are also required to understand the (cyclical and structural influences) on the current account balance, with a change in the exchange rate being one of those influences. For this question, the easiest way to connect the exchange rate to NFD is via the impact on international competitiveness and the current account balance. However, students should be careful if they attempt to make the connection via the 'valuation effect' stemming from a change in the exchange rate. While it is true that a depreciation can actually result in a lower 'value' of Australia's NFD (and/or NFLs), it is much more difficult to explain given that it relies on an understanding that Australia currently has a 'net foreign currency asset position' with the rest of the world. This means that the bulk of Australia's foreign liabilities (including debt owed to foreigners) are dominated in Australian currency, while much of Australia's foreign assets (including debt owed to Australia) are denominated in foreign currency. Accordingly, a depreciation of the Australian exchange rate (i.e. an appreciation of

foreign currencies such as the USD) will not change the AUD value of debt owed to foreigners (because it is denominated in AUD) but will raise the AUD value of debt owed to Australians (because it is denominated in foreign currency such as the USD).

Advice 2: Students often confuse net foreign debt (NFD) with net government debt (NGD) and incorrectly use these terms interchangeably in examinations. Students need to appreciate that that NGD is only a part of total NFD, with the other part coming from the private sector). Accordingly, students should steer away from making common mistakes, such as asserting that an exchange rate depreciation will increase NGD, or that an increase in the current account deficit will increase NGD. Or in the context of the relationship between budget outcomes and debt, students should avoid saying that a budget surplus will reduce NFD (when they should refer to NGD). In other words, a reduction in NGD does not mean that the NFD will decrease to the same extent –this is because the private sector is likely to borrow more in a climate of budget surpluses (or deficit reductions).

Sample answer: *A depreciation of the AUD is likely to contribute to an increase in the current account surplus (CAS) which in turn reduces the size/growth in NFD. This is because the depreciation improves the international competitiveness of Australia's tradeable sector [e.g. exporters and import competing firms] as exports become cheaper for foreigners and imports become more expensive for Australians. This leads to an increase in the value of net exports [X – M], increasing the surplus on both the Balance on Goods and Services and the current account. Given that the higher CAS must be offset by a lower Capital and Financial Account [to ensure that the balance of payments = 0], it means that debits in the CAFA, in the form of repayment of debt/investment in debt assets abroad, must increase which necessarily results in a lower 'level' of <u>Net</u> Foreign Debt [and/or lower growth in NFD].*

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

Note 2: Students might prefer to link a lower CAD to a smaller gap between national spending and national income, which reduces the need to borrow as much from overseas and therefore reduces the rate of growth in NFD. This approach is equally deserving of full marks.

d. Outline why a higher current account deficit (CAD) might not lead to an increase in Net Foreign Debt (NFD)
2 marks

- 1 mark for the identification of a relevant reason or a superficial outline (e.g. simply asserting that a CAD might instead lead to increase in Net Foreign Equity or NFE)
- 1 mark for additional detail that accurately unpacks the relationship

Advice 1: The Study Design requires students to demonstrate an understanding of the composition and cause of net foreign debt and net foreign equities. This means that students need to be aware that Australia's net foreign liabilities (NFLs) are made up of both net foreign debt (NFD) and net foreign equities (NFE). In other words, NFLs = NFD + NFE. It is common for students to confuse NFD and NFLs and students need to remember that NFLs include NFD in addition to the net value of overseas equity (e.g. ownership) in Australia (i.e. NFE). Importantly, both NFD and NFE require servicing, with NFD serviced via interest and NFE serviced via profits or dividends.

Advice 2: It is incorrect to argue that a CAD will always lead to a higher NFD as many students have done in past exams. Indeed, it is possible for a country to have a CAD, but experience no increase in NFD because instead of issuing debt to finance a CAD, a country can simply sell off some its assets (e.g. selling shares in companies to overseas residents). This means that NFD won't increase, but NFLs will, due to the increase in NFE.

Sample answer: *A higher CAD will typically lead to an increase in NFD because national spending will be rising relative to national income [or the CAD will be offset by a CAFA surplus, part of which will usually be the inflow of debt from overseas] which usually results in borrowed funds (i.e. foreign debt) coming from abroad to fund the shortfall [i.e. finance the CAD]. However, it is indeed possible for the inflow of foreign funds to be in the form of foreign equity (e.g. the sale of Australian assets, such as shares, to foreign investors) which raises NFE (and NFLs) rather than NFD.*

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

e. Describe how a depreciation of the Australian exchange rate will contribute to cost inflation.

2 marks

- 1 mark for a superficial description (e.g. a lower AUD leads to higher costs of production and prices)

or

- 2 marks for a more comprehensive description (e.g. one that elaborates on how costs of production rise)

Advice 1: The Study Design requires students to demonstrate an understanding of the causes of inflation, including demand inflation and cost inflation. In addition, students are required to know the effect of movements in the exchange rate on the domestic macroeconomic goals and living standards. Students are often tested on this key knowledge and, in the context of the influence on inflation (or price stability), students are often afforded some flexibility to explore the demand or supply side relationship. For example, a 3 mark question that asks students to explain the impact of an exchange rate depreciation on the achievement of price stability would only require students to explore the relationship from either the demand or supply side. However, the same question worth 5 marks would require an explanation on both the demand and supply sides. Given that the current question is only worth 2 marks, and there is specific reference to the supply side impact (i.e. cost inflation), students cannot be awarded any marks if they focus on a demand side explanation (e.g. how the depreciation stimulates net export demand, AD and demand inflationary pressures).

Sample answer: *A depreciation of the AUD will tend to increase cost inflation because the AUD price of imports will increase. Given that the majority of Australia's imports are producer goods (e.g. capital or intermediate goods), the depreciation will therefore add to the costs of production for businesses and they will typically pass on some (or all) of the higher costs to consumers in the form of higher prices.*