



VCE ECONOMICS 3/4
CPAP Practice examination No 1 2017

SUGGESTED
RESPONSES/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

Question 1

Material living standards for Australians is most likely to fall when:

- A. The physical and mental health of Australians has decreased
- B. The life expectancy of the average Australian has fallen
- C. Literacy levels fall below acceptable standards
- D. Inflation rises faster than nominal wages**

The new Study Design still requires students to demonstrate an understanding of the factors impacting on living standards, both material and non-material. It also specifically lists a selection of factors that influence Australian living standards: access to goods and services, environmental quality, physical and mental health, life expectancy, crime rates and literacy rates. Students should be able to recognise that, with the exception of access to goods and services, these factors are non-material in nature. For the current question, **option D is the best response** because inflation rising faster than nominal wages essentially means that real wages are falling, which in turn reduces the purchasing power of workers and ultimately reduces their access to goods and services, and negatively impacts on their material living standards. While it is possible to mount an argument that each of the other factors, summarised in A – C, can lead to a reduction in material living standards, these options remain inferior to option D as it is the option most likely to reflect or cause a fall in material living standards.

Question 2

JUNE KEY FIGURES

Weighted average of eight capital cities	Mar Qtr 2017 to Jun Qtr 2017 % change	Jun Qtr 2016 to Jun Qtr 2017 % change
All groups CPI	0.2	1.9
CPI analytical series		
Trimmed mean	0.5	1.8
Weighted median	0.5	1.8

Source: <http://www.abs.gov.au>

Which of the following statements is correct in relation to the June quarter Consumer Price Index (CPI) figures summarised above?

- A. The annualised rate of headline inflation was 0.8%**
- B. The annual rate of underlying inflation was 1.9%
- C. The annualised rate of underlying inflation was 0.5%
- D. The quarterly rate of headline inflation was 1.9%

Reference to the annualised rate of inflation is made in this question because students experienced difficulty appreciating the difference between the annualised and the annual rate of inflation in the 2016 exam. Question 5 of the multiple choice section in that exam referred to the adjacent table and quizzed students on what the annualised rate of inflation was for Quarter 2. Only 22% of students chose the correct answer (which was option C of 4% annualised inflation), with 68% of students selecting option A (1% annualised inflation). It highlights that relatively few students were aware that that a quarterly 1% growth in the CPI becomes an annualised figure when it is multiplied by 4.

In the current question, **option A is the best response** because the annualised growth in the CPI is simply the quarterly figure of 0.2% multiplied by 4. All other options B – D are incorrect. With respect to option B, the underlying rate is actually 1.8% (either the trimmed mean or the weighted median). With respect to option C, the annualised rate of underlying inflation is 2.0% (i.e. 0.5% x 4). With respect to option D, quarterly rate of headline inflation is 0.2%.

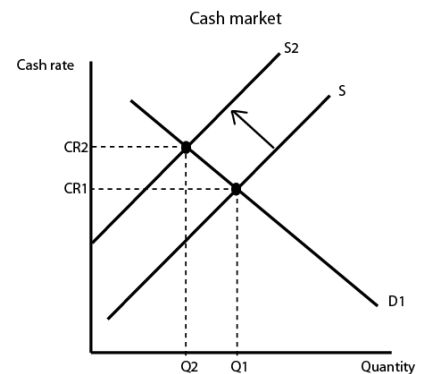
Time period	CPI
Quarter 1	100
Quarter 2	101
Quarter 3	102
Quarter 4	103

Question 3

If the RBA was intending to implement a less expansionary monetary policy stance in 2018, as predicted by many economists, it would need to:

- A. Sell government securities in order to increase supply of cash in the cash market and drive interest rates up
- B. Sell government securities in order to decrease the supply of cash in the cash market and drive interest rates down
- C. *Sell government securities in order to decrease the supply of cash in the cash market and drive interest rates up*
- D. Purchase government securities in order to restrict supply of cash in the cash market and drive interest rates up

Students are required to demonstrate some understanding of 'the role of open market operations in altering interest rates' in the new Study Design. Students typically find this area of the course to be quite challenging, often becoming confused about whether a purchase or sale of bonds or securities is required to give effect to any desired change in the cash rate or interest rates more generally. To tighten monetary policy (and achieve a less expansionary stance in the current context), the RBA needs to increase interest rates. It does this by manipulating the cash market in order to restrict supply (or decrease liquidity) which pushes up the price of cash (i.e. the cash rate), which then ultimately flows through to increase general interest rates in the economy. For questions of this nature, students would be wise to quickly draw up a D/S diagram like the one included here which should help them to appreciate how the RBA needs to manipulate the cash market in order to achieve a higher cash rate.

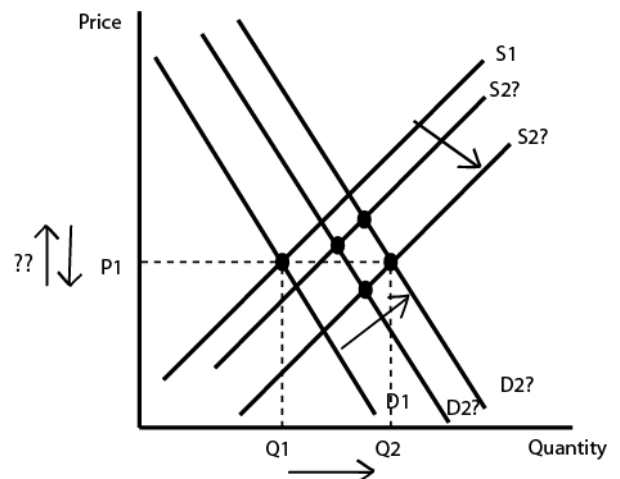


Question 4

Electric cars are becoming increasingly popular and at the same time technological advances are helping to reduce the costs of electric car production. In light of these two factors impacting on the market for electric cars, it can be concluded that the:

- A. The equilibrium quantity might increase or decrease
- B. *The equilibrium price might increase or decrease*
- C. The equilibrium price and equilibrium quantity should rise
- D. The equilibrium price and equilibrium quantity should fall

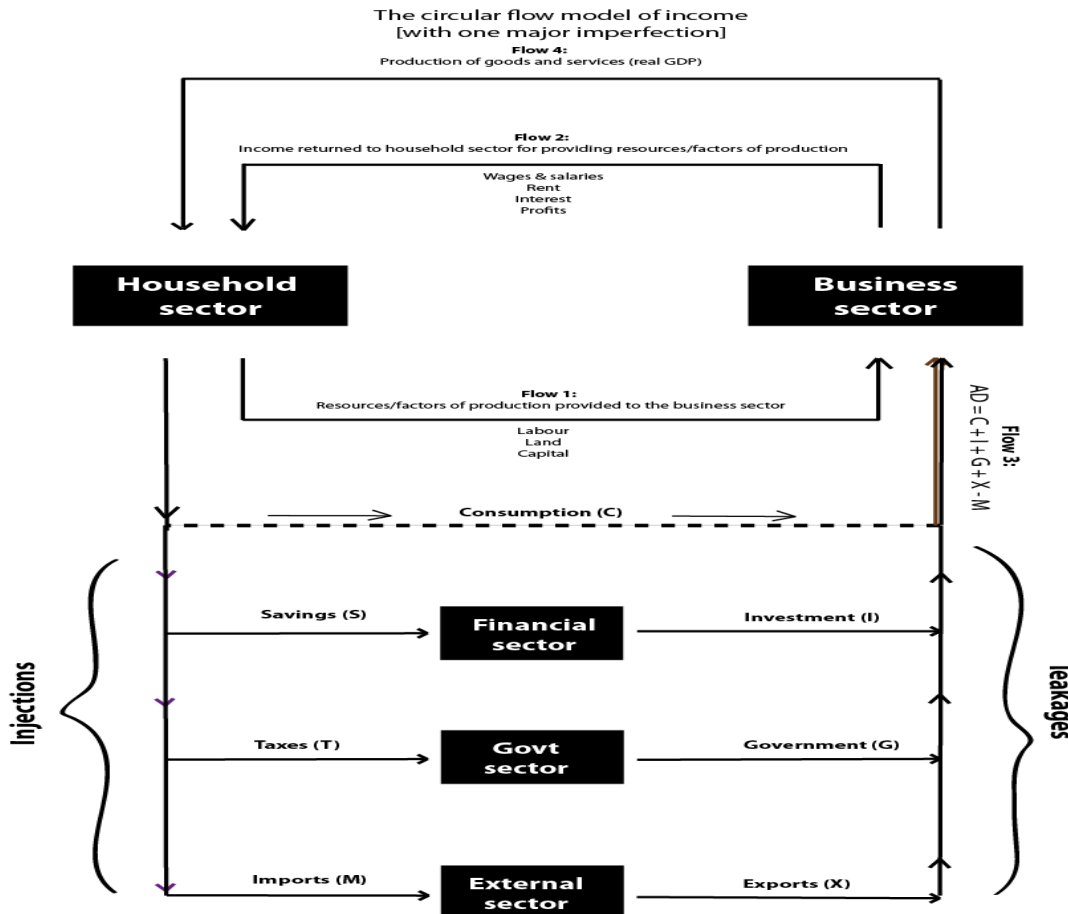
This question is heavily modelled on the second most poorly handled multiple choice question on the 2016 exam. Question 14 of that exam asked students to determine the market impact following a decrease in the popularity of a product and a rise in the costs of production. Only 27% of students were able to correctly identify that the outcome for the equilibrium price is uncertain given that the demand and supply curves both shift to the left. 59% of students chose the option that suggested equilibrium price and quantity would both fall. This highlights the need for students to quickly draw up a small demand and supply diagram in the border of the paper to ensure that mistakes like this are avoided. The current question has the demand and supply impacts moving in the opposite direction to last year's exam, with both demand and supply increasing rather than decreasing. Drawing a demand and supply diagram such as the adjacent one (note that there is no need to label curves or axes as has been done in this example) should quickly reveal that **option B is the only correct response** given that the



impact on price will be uncertain in the absence of any additional information. While there is an unequivocal increase in the quantity of electric cars produced (Q_1 to Q_2), the outcome for price will ultimately depend on the relative strengths of the shift in demand and supply. For example, as shown in the adjacent diagram, price will rise if the increase in demand exceeds the increase in supply, price will fall if the increase in supply exceeds the increase in demand, or price will remain unchanged at P_1 if the increase in supply is equivalent to the increase in demand.

Question 5

The circular flow model of income drawn below contains a significant error. Which option below will correct this error?



- A. The Household sector should be swapped with the Business sector
- B. Injections should be swapped with leakages**
- C. The Financial sector should be swapped with the Govt sector
- D. Exports (X) should be swapped with Imports

The new Study Design now specifically requires students to demonstrate an understanding of the circular flow model of income. It is unlikely that students will be required to draw the complete model in Section B of the exam given that this would be quite time consuming. Instead, students should expect to interpret the model in some way and/or use it to illustrate how certain factors might impact on AD or real GDP. For example, students might be asked to explain how a tightening of monetary policy might impact on AD, making reference to the circular flow model of income or outline how the current appreciation of the Australian dollar impacts on AD and real GDP making reference to the circular flow model of income. For the current question, students are only required to demonstrate an understanding of the mechanics of the model, with the best students able to quickly identify **option B as the only correct response** given that leakages and injections need to be swapped in order for the model to be accurate.

Question 6

The price elasticity of supply for an agricultural product will not fall if

- A. *There is a decrease in the availability of substitute products*
- B. There is a decrease in productive capacity following the impact of a natural disaster such as Cyclone Debbie
- C. A virus reduces the durability of the product
- D. Farm productivity falls and it takes longer to harvest the product

*Past exams reveal that some students confuse the factors affecting the price elasticity of supply with factors affecting price elasticity of demand. The new Study Design still requires students to have a knowledge of factors affecting these and specifies those factors students need to be aware of including, for PED, the degree of necessity, availability of substitutes, proportion of income and time, and for PES, spare capacity, reduction period and durability of goods. In the current question, options B –D are all examples of factors that should cause the PES to fall (i.e. reduce the ability of farmers to respond to higher market prices by supplying more to the market). Option B relates to spare capacity; option C relates to durability of goods and option D relates to production period. **Option A is the best response** because it represents a factor that will affect the price elasticity of demand (not supply).*

Question 7

Which of the following recent economic factors will have an impact on the level of aggregate demand that is different to the other three?

- A. An increase in the Medicare levy
- B. An increase in market rates of interest
- C. An increase in the trade weighted index
- D. *An increase in consumer confidence*

*The new Study Design requires students to have a knowledge of the following factors that influence the level of AD: the general price level, disposable income, interest rates, consumer and business confidence, the exchange rate, in growth rates overseas. For questions of this nature students should use arrows adjacent to each option to indicate the likely direction of the impact on AD. **Option D is the best response** because an increase in consumer confidence is likely to stimulate consumption and AD. All other options A – C have the reverse effect. With respect to option A, an increase in the Medicare levy reduces disposable income and negatively impacts on consumption and AD. With respect to option B, an increase in interest rates [note that this has occurred in Australia over the past year despite there being no change in monetary policy settings] will reduce discretionary income of households and businesses and negatively impact on consumption, investment and AD. With respect to option C, the increase in the trade weighted index (i.e. an appreciation of the exchange rate) will reduce Australia's international competitiveness and negatively impact on net exports and AD.*

Question 8

The following table contains information relating to a hypothetical economy.

Quarter/Year	Nominal GDP (\$billion)	Real GDP (\$billion)
December 2016	100	100
March 2017	102	101
June 2017	104	103
September 2017	106	104
December 2017	108	105

Economic growth for this economy over the year to end December 2017 is:

- A. 8%
- B. 5%**
- C. 6%
- D. 4%

*One of the key skills in the new Study Design is the need for students to calculate relevant economic indicators using real or hypothetical data. In addition, a key knowledge point includes the need for students to be able to measure the rate of economic growth using real Gross Domestic Product (GDP). The current question requires students to know how economic growth is measured (i.e. testing the relevant key knowledge point in the Study Design) as well as to calculate the growth in real GDP (or economic growth) from the given hypothetical data (i.e. testing the relevant key skill). **Option B is the best response** because economic growth is determined by calculating the growth in real GDP (not nominal GDP) for the given period. In this case, economic growth over 2017 is calculated as follows: $(105-100)/100 \times 100 = 5\%$. Those students selecting option A are likely to have confused nominal GDP with real GDP given that the growth in nominal GDP over the same period is 8%. Those students incorrectly selecting options C or D are likely to have selected the wrong starting point (i.e. March 2017) from which growth over the course of 2017 is determined when the correct starting point for calculating annual figures should always be the same quarter one year earlier (i.e. December 2016).*

Question 9

Australia's international competitiveness is likely to fall if:

- A. the government eases regulations that previously restricted the ability to access natural resources
- B. the exchange rate increases**
- C. there is a decrease in real unit labour costs
- D. labour productivity rises

*The new Study Design requires students to have a knowledge of the following factors that might influence international competitiveness: productivity, production costs, availability of natural resources, exchange rates, and relative rates of inflation. Students should ensure that they can demonstrate an understanding of how each of these factors will impact on the prices of Australian goods and services (and inflation) and therefore the international competitiveness of Australia's tradables sector (i.e. exporting businesses as well as those businesses competing against imports). **Option B is the best response** because an appreciation of the exchange rate leads to the prices of Australian exports becoming relatively more expensive in global markets, as well as causing the price of imports to become relatively cheaper, which in turn decreases the competitiveness of domestic import-competing producers. All other responses will help to increase Australia's international competitiveness. With respect to option A, easier regulations will enable, for example, mining or resource companies to more easily extract ore from the ground, which increases supply and reduces prices. A reduction in real unit labour costs will help to reduce the average costs of production for businesses and exerts downward pressure on prices, which further improves competitiveness. Similarly, growth in labour productivity (which itself helps to reduce real unit labour costs) will also help to reduce production costs and prices.*

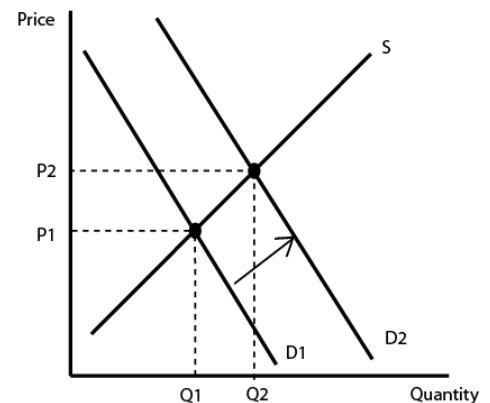
Question 10

Other things being equal, the fall in the price of petrol over recent years is likely to have which of the following impacts on the market for petrol powered motor vehicles?

- A. A shift of the demand curve to the right, an increase in price and an increase in quantity sold
- B. A shift of the demand curve to the right, a decrease in price and an increase in quantity sold
- C. A shift of the demand curve to the right, an increase in price and a decrease in quantity sold
- D. A shift of the supply curve to the right, an increase in price and an increase in quantity sold

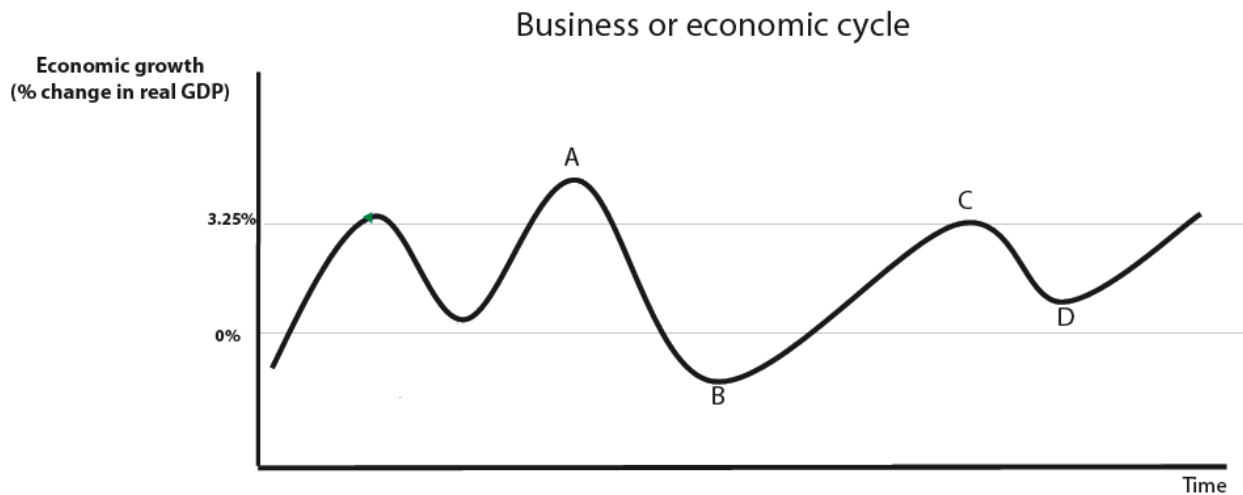
Section A of the examination often includes questions relating to the impact of a change in the price of a complement or a substitute product and students often have difficulty distinguishing the impact. For example, question 4 of the 2014 exam was poorly handled, with 42% of students selecting the wrong response. In that case, many students believed that an increase in the price of a complementary product would shift the demand curve to the right and result in a higher price, when the reverse is true. For questions of this nature, students should quickly draw up a D/S diagram to eliminate the unlikely options. In the current example it should become apparent that **option A is the only correct option**, with all other options containing one of the variables moving in the wrong direction.

Market for petrol powered motor cars
[If there is a fall in price of a complement such as petrol]



Question 11

In relation to the business/economic cycle diagram below, which of the following statements is correct?



- A. The budget is likely to move into surplus at point B
- B. The target cash rate is likely to be below the neutral rate at point A
- C. The labour force underutilisation rate is likely to be rising between points C and D
- D. Real wages growth is likely to be rising between points A and B

The new Study Design requires students to be aware of both the nature and the causes of the business cycle. Accordingly, students should be prepared to answer questions that test their understanding of what might cause the economy to enter the boom phase of the cycle (e.g. excessive business and consumer confidence) or the downturn phase of the cycle (e.g. overinflated prices of various assets). Alternatively, questions (such as this one) might attempt to test student understanding of how the natural fluctuations in the economy will impact on key economic variables, including possible policy responses (which relates to the nature of the business cycle). **Option C is the best response** because a decrease in the rate of

economic growth (i.e. a move from C to D) is likely to reduce (growth in) the demand for labour which exerts upward pressure on the unemployment rate and/or the underemployment rate (which together make up the labour force underutilisation rate). Option A is incorrect because at point B the economy is experiencing negative economic growth, which is likely to result in a budget deficit for both cyclical and structural reasons. Option B is incorrect because at point A the economy is booming with growth above the long run trend rate of growth which suggests that the monetary policy stance will be restrictive, with the target cash rate above the neutral rate (which is currently considered to be approximately 3.5%). Option D is incorrect because when the economy moves from point A to B, it is entering a downturn, which is likely to reduce the demand for labour and therefore exert downward pressure on the growth in both nominal and real wages.

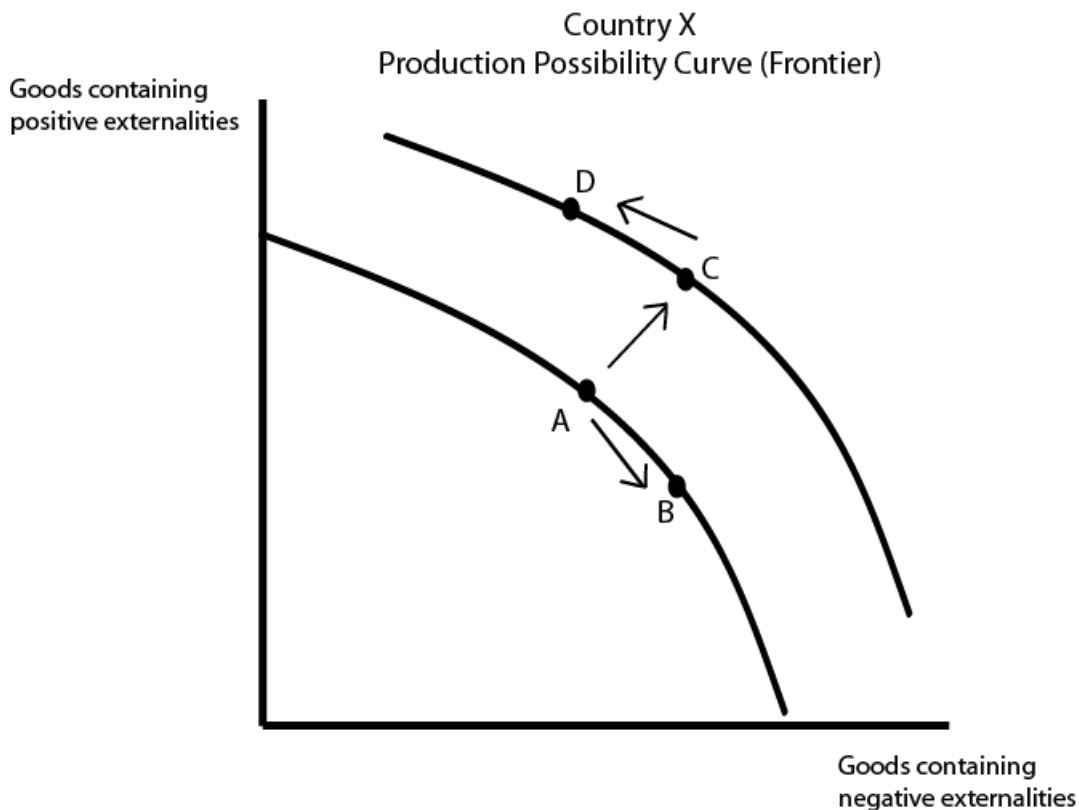
Question 12

Which of the following monetary policy transmission mechanisms (i.e. transmission channels) affects aggregate demand by influencing the willingness of households and businesses to borrow money from banks?

- A. *Savings and investment*
- B. Cash flow
- C. Exchange rate
- D. Asset prices

*Unlike the old Study Design, the new Study Design specifically lists all of the five transmission mechanisms of monetary policy. This includes 'the availability of credit' as well as the four listed above. In past exams, students were not asked to demonstrate an understanding of more than two transmission mechanisms/channels. In the event that students were provided with a choice of channels to discuss, it was the savings and investment channel (also known as the cost of credit channel), the cash flow channel or the exchange rate channel that were the focus. While this is still likely to be the case in future exams, students should be prepared to be examined specifically on any one of the channels now listed in the Study Design. Accordingly, the asset prices channel and the availability of credit channel should not be ignored. In relation to the two most common channels, savings and investment and cash flow, students would often confuse the two channels and refer to the impact on household budgets (or discretionary income) when discussing the savings and investment channel, or refer to the reduced willingness to borrow when discussing the cash flow channel. In relation to the current question, **Option A is the correct response** because an increase in interest rates, for example, will increase the cost of credit (i.e. raises the price of a loans) which necessarily reduces the willingness to borrow (i.e. reduces the demand for loans). The cash flow channel works by reducing the discretionary income of economic agents as more income is used to repay existing debt. The exchange rate channel works by reducing net export demand given that the exchange rate will appreciate in response to higher interest rates. The asset prices channel works by reducing the value of assets (such as property) which then reduces spending via a wealth effect.*

Question 13



The diagram above relates to the production possibilities for a hypothetical country (Country X). Which statement below is incorrect?

- A. The movement from A to B and C to D illustrate the economic concept referred to as opportunity cost
- B. The movement from A to C reflects an increase in productive capacity
- C. The movement from C to D reflects a reallocation of resources in the economy
- D. *The movement from C to D has no impact on allocative efficiency*

The new Study Design still requires students to demonstrate an understanding of standard economic terms or concepts such as opportunity cost, allocative efficiency and productive capacity. The added twist to this question is the inclusion of goods containing positive and negative externalities (also required knowledge in the Study Design) as the two production possibilities. **Option D is the best response** because it is incorrect to say that there is no impact on allocative efficiency when an economy reallocates resources away from the production of goods containing negative externalities and towards the production of goods containing positive externalities. In this example, allocative efficiency will increase given that more resources within Country X will be allocated to the production of goods that ultimately produce a better outcome for society. All other options refer to statements that are correct. With respect to option A, movements along a PPC will always illustrate the concept of opportunity cost given that it reflects a sacrifice in the production of one good in order to attain another. With respect to option B, a shift outwards of the PPC reflects an increase in productive capacity as more of both types of goods can be produced by the economy. With respect to option C, the movement from C to D reflects resources (such as labour and capital) moving away from the production of goods containing negative externalities and towards the production of goods containing positive externalities.

Question 14

In relation to government current and capital expenditure, it is incorrect to say that:

- A. Military equipment is an example of capital expenditure and wages to public servants is an example of current expenditure
- B. Capital expenditure creates longer lasting benefits for society compared to current expenditure
- C. Spending on infrastructure is an example of current expenditure and the purchase of rubber gloves, syringes and stationery by a hospital is an example of capital expenditure**
- D. Education spending will include both current and capital expenditure

*The inclusion of capital versus current expenditure is one of the new key knowledge points in the current Study Design. The distinction between the two types of expenditure is important in the context of budgetary policy (or businesses and households more generally) because it helps the government to determine the ongoing value related to its budget expenditures. Excessive current expenditure relative to capital expenditure will typically have negative implications for longer term living standards, and governments are always concerned about achieving the right balance between the two types of expenditures. To illustrate, when delivering the 2017-18 budget in early May 2017, the government highlighted the difference between what it referred to as 'good debt' versus 'bad debt'; with the latter occurring when the debt was created largely by excessive current expenditure relative to capital expenditure. For the current question, **option C is the best response**. Spending on infrastructure is an example of capital (not current) expenditure because the building of roads, airports, schools, hospitals, etc. will create long-lasting (more than one year) benefits for society. In contrast, rubber gloves, syringes, etc. are examples of current expenditure because they are disposables and are likely to be used up within a year. All other options refer to statements that are correct.*

Question 15

Which of the following labour market indicators is likely to be the best indicator of spare capacity in labour markets?

- A. Hidden unemployment
- B. The participation rate
- C. The labour force underutilisation rate**
- D. The unemployment rate

*The new Study Design requires students to have a knowledge of various labour force classifications and indicators, specifically: employed, unemployed, hidden unemployment, disguised or under employment, the labour force participation rate and the labour force underutilisation rate. Over the past couple of years there has been much economic commentary relating to the casualisation of the labour force which has caused underemployment (and the labour force underutilisation rate) to rise relative to the unemployment rate. Given that there has been an increasing number of workers who are being underutilised (i.e. they would prefer to be working more hours), it makes the unemployment rate (or the level of unemployment) a less meaningful indicator of spare capacity in labour markets because those workers who are underemployed (i.e. are examples of underutilised labour or spare capacity) are not counted in the unemployment statistics (that is they are considered employed because they are working more than one hour per week). Given that the labour force underutilisation rate includes both the unemployment rate and the under employment rate, it is a far better indicator of spare capacity in labour markets. **This makes option C the best response**. With respect to option A, hidden unemployment refers to those people who would like to work, but who have become discouraged and are no longer actively seeking work. While this can, to some extent, provide an indication of spare capacity, it is a less complete indicator compared to the labour force underutilisation rate. With respect to option B, the labour force as a proportion of the working age population can also be considered a crude indicator of spare capacity given very low participation rates 'might' indicate that there are large numbers of people who might be prepared to work if a job was offered. However, like hidden unemployment, these people are not technically part of the labour market in any case which makes the LFPR less meaningful as an indicator of spare capacity in labour markets. With respect to option D, the unemployment rate is the next best indicator of spare capacity but it is inferior to the underutilisation rate for the reasons outlined earlier.*

Question 1 (21 marks)

Consider the following hypothetical data relating to the market for a 3kW solar panel system in Australia.

Market for 3kW solar panel system (for Oct-Dec 2017)		
Price (\$000)	Demand (000)	Supply (000)
2	70	10
3	60	20
4	50	30
5	40	40
6	30	50
7	20	60
8	10	70

a. Referring to the data relating to the market for a solar panel system in Australia:

i. In the space provided below, construct a fully labelled demand and supply diagram to reveal how price and quantity is determined in the market.

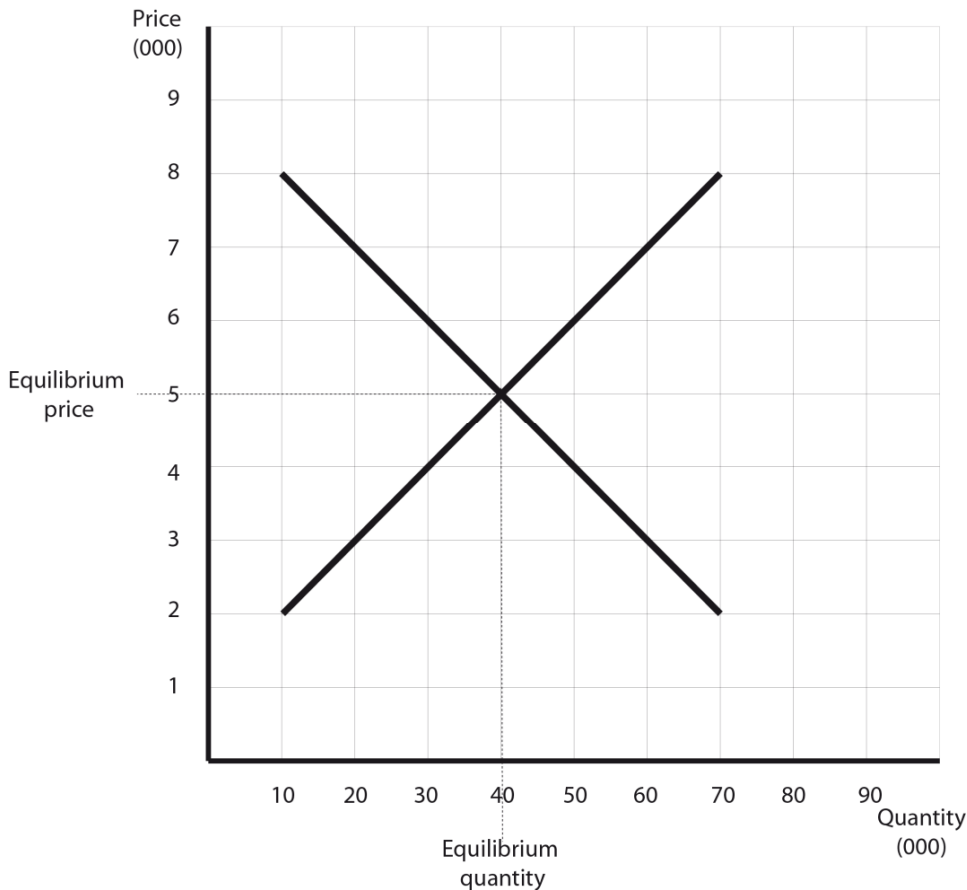
4 marks

Advice: The new Study Design requires students to demonstrate the skill of constructing and interpreting demand and supply diagrams, which has not been required by students in VCE examinations over the past 20 years. The current question is similar to the opening question of the VCAA's Sample Paper released in early 2017 [<http://www.vcaa.vic.edu.au/Documents/exams/economics/economics-samp-w.pdf>]. Students should ensure that they correctly label the vertical (Y) and horizontal (X) axes, as well as each of the 'key' data points (i.e. an equilibrium price of \$5 and equilibrium qty of 40). It is therefore not expected that every single data point is included on the diagram as shown in the sample response. More importantly, students need to ensure that:

- the demand curve slopes down from left to right, commencing from price = \$8(000) and quantity = 10(000) and ends at price = \$2(000) and quantity = 70(000)
 - the supply curve slopes up from left to right, commencing from price = \$2(000) and quantity = 10(000) and ends at price = \$8(000) and quantity = 70(000)
 - the demand and supply curves intersect at a price of \$5(000) and a quantity of 40(000).
- 0.5 marks for correctly labelling the Y axis as Price (or P)
 - 0.5 marks for correctly labelling the X axis as Quantity (or Q)
 - 1 mark for correctly positioning the demand curve
 - 1 mark for correctly positioning the supply curve
 - 0.5 marks for correctly identifying the market determined price at \$5(000)
 - 0.5 marks for correctly identifying the market determined quantity at 40(000)

Sample response:

Market for 3kW solar panel system



ii. explain what is meant by equilibrium, making reference to the market for solar panels above

2 marks

- 1st mark for adequately explaining what is meant by equilibrium
- 2nd mark for making adequate reference to the market for solar panels

Sample response: *Equilibrium in a market refers to the price at which the quantity demanded equals the quantity supplied such that the market is in a state of rest. In relation to the market for solar panels, a price of \$5000 per system will ensure that the amount consumers are prepared to buy at that price (i.e. 40,000 systems demanded) exactly equals the amount producers are prepared to supply to the market at that price (i.e. 40,000 systems supplied). There is neither a surplus nor a shortage of solar panels in the marketplace and a price of \$5000 per system 'clears the market'.*

- b. Explain how a government subsidy for consumers who install solar panel systems is likely to impact on the market for solar panel systems and describe how the market adjusts from one equilibrium to another. To illustrate your response, draw the change on the diagram created in part ai. 5 marks**

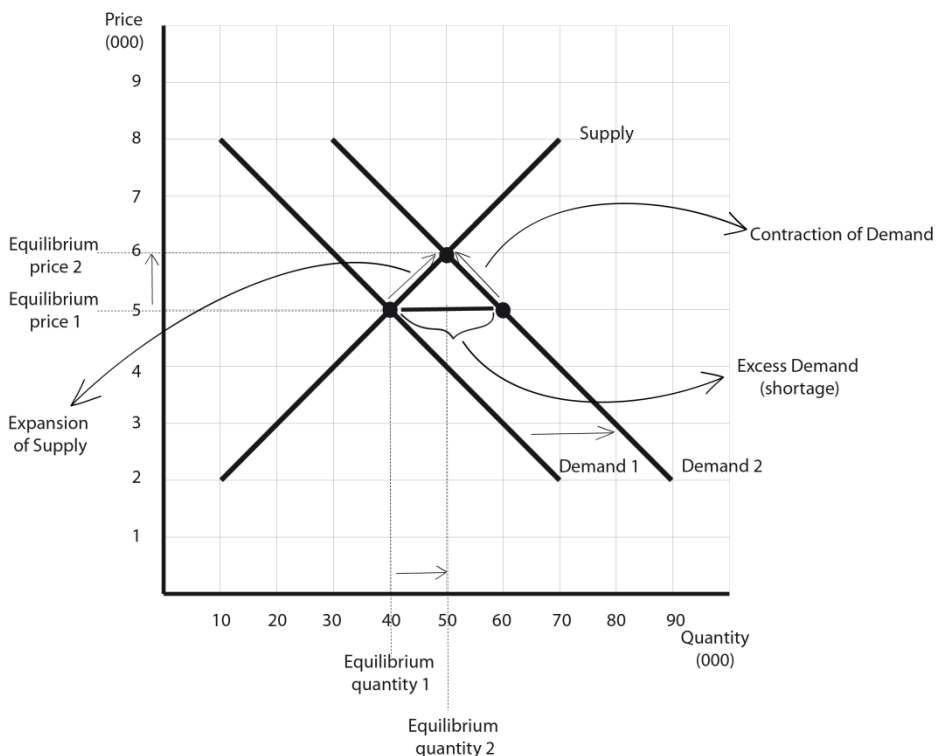
Advice 1: Students should be prepared for questions that test their understanding of the dynamics associated with moving from one equilibrium position to another. Historically, students have performed poorly answering questions related to the price mechanism and, in particular, how markets respond to disequilibrium. It is important to remember that market adjustments are necessarily driven by shortages (excess demand) or surpluses (excess supply) that occur in disequilibrium and that contractions and expansions (of demand and supply) in response to changes in price are means by which markets return to equilibrium. Making reference to these terms/concepts will typically be required for students to achieve full marks.

Advice 2: Reference to the term 'subsidy' has been introduced into the new Study Design in the context of government intervention in the market to address market failures. Students should be prepared to explain how subsidies work to reallocate resources from one part of the economy to another. Importantly, students should be prepared to distinguish the impact of a consumer subsidy (such as that referred to in the current question) from a producer subsidy. While both consumer and producer subsidies result in the desired increase in production (and resource allocation), the impact on market prices will be quite distinct. Consumer subsidies result in higher prices while producer subsidies result in lower prices. Confusing the two will be costly in an examination.

- 1 mark for explaining that the subsidy results in an increase in consumer demand (and a shift to the right of the demand curve)
- 0.5 marks for explaining the impact on price
- 0.5 marks for explaining the impact on quantity
- 2 marks for describing the dynamics of adjustment
- 1 mark for accurately using the diagram for illustration by showing the shift of the D curve and the new equilibrium outcomes

Sample answer: *A subsidy to consumers will make it more cost-effective for consumers to install a solar panel system and results in an increase in the demand for solar panels at every given price. This will cause the demand curve to shift to the right. At the pre-existing price of \$5000 per system, the market will move into a position of excess demand [i.e. a shortage of solar panel systems should develop] and producers will respond by raising prices in order to maximise profits. As prices increase over time, demand will fall (i.e. a contraction along the demand curve) and supply will rise as producers seek to take advantage of the greater profit opportunities that exist. The size of the shortage will fall and prices will continue to rise until the shortage is eliminated and the market will return to a state of rest, with a new higher equilibrium price and quantity traded.*

Market for 3kW solar panel system



c. Referring to 'market failure', explain why the government provides financial incentives for consumers or producers to invest in renewable energy options, such as solar panel systems. 4 marks

Advice: Like the old Study Design, the new Study Design maintains a focus on market failures, with the emphasis restricted to public goods, externalities, asymmetric information and common access resources (which replaced market power). Questions related to market failures are typically not handled well by students, with scores for such questions often averaging below 50%. Students should always remember that the presence of market failure means that the government needs to intervene in the economy in order to ensure that a more efficient allocation of resources is achieved. The term market failure is therefore closely connected to (in)efficiency in the allocation of resources (re allocative efficiency) which means that too few resources are allocated to some areas (e.g. public goods) and/or too many resources are allocated to others (e.g. overuse of common access resources). For the current question, the better performing students will be those who not only refer to market failure, but also to the specific type of market failure relevant in the context of renewable energy (i.e. positive externalities in consumption) or the reduction in the negative externalities in production that come from moving away from the use of non-renewable energy.

- 1 mark for demonstrating an understanding of market failure
- 1 mark for making accurate reference to positive externalities associated with renewable energy (or the negative externalities associated with the production of coal fired electricity)
- 2 marks for an accurate justification of the need for financial incentives

Note: It is not expected that students will refer to financial incentives for consumers and producers. In the event that students explain both types of incentives, the 2nd explanation should not be assessed.

Sample answer: *This is because, without government regulation or intervention, the market left to its own devices would result in an under-allocation of resources to the production of renewable energy systems, such as solar panel systems. In this respect, the market fails to achieve the best outcomes for society and leads to an inefficient allocation of resources. Insufficient resources would be allocated to the production of renewable energy systems because they are an example of products that contain positive externalities in consumption. The market would therefore not account for the '3rd party' or 'social' benefits that are derived from the consumption of renewable energy systems. Without government financial support (for either consumers or producers), renewable energy systems would simply be 'too expensive' for*

many households/businesses who are typically only concerned about the private benefits stemming from their consumption and ignore the wider benefits for society (e.g. the beneficial impact on the environment). This would lead to an insufficient level of consumption relative to the optimal level from society's point of view.

Note 2: Some students are likely to approach the question from the perspective of subsidies being used to address the market failure in the form of negative externalities. Students can be awarded full marks for this approach so long as they clearly demonstrate how the subsidy works to reduce the demand for and production of goods (such as coal fired electricity) containing negative externalities [as consumers substitute towards the government supported renewable energy options].

d. Explain one 'non-government' factor that could cause the price of solar panel systems to fall and the quantity produced to rise. 3 marks

Advice: The Study Design specifically lists a number of factors that are likely to affect supply and the position of the supply curve. These are: changes in the costs of production, technological change, productivity growth and climatic conditions. Students should therefore expect to show how each of these supply factors can impact on markets.

- 1 mark for identifying an appropriate supply factor
- 2 marks for an accurate explanation for how the factor results in lower prices and greater quantities

Sample response: *Advances in technology could be a factor resulting in greater productivity (e.g. new technology that allows fewer panels to achieve the same energy output), allowing the costs of solar panel production to fall [pushing the supply curve to the right] and encouraging solar panel suppliers to reduce price in order to attract more sales. As prices fall over time, the quantity demanded of solar panel systems will increase, which results in profit maximising suppliers producing a greater volume of solar panel systems.*

e. Describe one contemporary example of government intervention in markets that might unintentionally reduce efficiency in the allocation of resources. 3 marks

Advice 1: the new Study Design requires students to have a knowledge of one contemporary example of government intervention in markets that unintentionally leads to a decrease in the efficiency of resource allocation. This is a key knowledge point that is likely to cause students headaches in the examination, particularly given that it is natural to think of government intervention being designed to achieve a more efficient allocation of resources (i.e. in addressing market failure). There are several examples for students to focus on and, in many cases, the extent to which 'government failure' has occurred over recent years is debatable. In this context, students need to be careful that they do not make unsubstantiated, unsupported or politically motivated claims about the failure of certain government initiatives or interventions. Examiners will attempt to focus on the economic arguments put forward by students to support a contention rather than the contention itself. For example, many commentators contend that the government's current climate change (direct action) policy is resulting in an inefficient allocation of the country's resources. If students choose to use this 'contemporary' example then it is important to highlight how the current direct action plan and/or heavy support for renewable energy may be sub-optimal, leading to an inefficient allocation of resources.

Advice 2: The exam setting panel are likely to be somewhat lenient when assessing student responses in this area given that the precise meaning of 'contemporary' is open to debate. For example, some might argue that contemporary relates to the last 1-3 years, whereas others might consider anything after 2000 as contemporary. Given that the term 'contemporary' is not defined in the Study Design, it is safest to write about government interventions that are most recent, such as the provision of subsidies or other forms of protection that reduce technical and allocative efficiency in the long run; or the existence of minimum wages that creates a waste of resources in the form of unemployment; or the existing tax laws (e.g. negative gearing and capital gains tax concessions) that are leading to an inefficient allocation of resources in terms of too few resources allocated to affordable housing.

Advice 3: 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. The best responses will be those that attempt to make this argument. For example, arguing that the economic stimulus benefits of the home insulation scheme implemented over 2008-9 was outweighed by the costs in terms of the roting and waste that took place as well as the injuries and deaths that occurred during installation. However, students are also likely to be rewarded if they explain/describe/outline an unintended consequence related to a particular government intervention. For example, a student might argue that the introduction of the alcopops tax in 2008 (designed to reduce binge drinking by teenagers) had the unintended consequence of creating more demand for straight spirits or even illicit drugs and resulting in resources being allocated to the production of these de-merit goods. This type of response stops short of saying that the policy was an example of government failure (i.e. resulted in an overall or net reduction in efficiency) and instead simply focuses on a negative facet (or consequence) of the intervention. The better responses will be those from students who are prepared to extend the response by attempting to mount an argument supporting the contention that the intervention resulted in an overall reduction in economic efficiency.

- 1 mark for identifying a 'relevant' and contemporary example
- 2 marks for a description of how the allocation of resources in the economy has become less efficient as a result of the government intervention

Sample response: *The provision of government subsidies that have been designed to protect Australian industries and/or promote employment, such as those provided to the defence industry, the aluminium manufacturing industry (e.g. Alcoa's Portland smelter) and previously the motor vehicle industry, unintentionally resulted in a less technically efficient allocation of the nation's resources. Producers in these protected industries were able to artificially keep their prices lower than otherwise, which granted them relatively more power to compete or bid for resources against other (unprotected) Australian producers. In addition, these protected producers were somewhat shielded from the rigours of international competition, which created complacency and caused management to be less proactive in seeking efficiency gains via reform or restructure. Inevitably, this resulted in a slowdown in productivity growth, adding unnecessarily to production costs and reducing technical efficiency. As a consequence, the allocation of resources in the economy were suboptimal in the sense that too many resources were allocated to those industries in which Australia did not have a competitive advantage.*

Question 2 (21marks)

The Government remains committed to its strategy of returning the budget to balance by maintaining strong fiscal discipline, strengthening the Government's balance sheet and redirecting government spending to boost productivity and workforce participation. [...]The Government is also strengthening participation requirements for welfare recipients to better drive participation outcomes.

Source: 2017-18 Budget Statement 1 (Budget Overview)

a. Outline what is meant by a balanced budget.

2 marks

Advice 1: The new Study Design specifically requires students to know the difference between the three possible budget outcomes (balance, deficit and surplus) and the current question shouldn't pose problems for students. Importantly, students needn't go beyond the obvious response and waste time talking about the difference between the fiscal, cash and underlying outcomes nor any other factor related to balanced budgets (such as the relationship to government debt, interest rates, etc.).

Advice 2: Students should be careful not to spend too much time responding to questions worth 2 marks given that it can come at a big 'opportunity cost' in terms of leaving students little time to answer the longer 4-6 mark questions. This point was made by the Chief Assessor in the 2016 examination report where she said that students need to "use the mark allocation and command terms in questions in Section B as a guide to the extent of the response required. For example, a number of students wrote long answers to questions such as Section B, Questions 1a., 2a. and 2c., which were 'outline' questions worth two marks, but did not develop more detailed responses to questions worth four or six marks'.

- 2 marks for stating that total receipts/revenue equal total expenditure/expenses/payments

Sample response: *A balanced budget occurs when the (federal) government's total receipts or revenue are equal to the government's expenditure or expenses [which means that the budget outcome is zero].*

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

Note 2: Full marks should not be awarded if a student simply responds by saying that a balanced budget means that the budget outcome is zero.

b. Describe one budgetary policy initiative from the past two years that might help to achieve budget balance and explain how this is likely to impact on price stability (low inflation).

4 marks

Advice 1: The new Study Design requires students to have a knowledge of budget initiatives from the past two years in terms of how they impact on government goals. For this question, students must refer to an actual measure or initiative announced or implemented 'from the past two years' and not a hypothetical measure. It is insufficient to simply say that the government has reduced expenditure and/or increased revenue over the past two years. Nor would it be appropriate to argue that an initiative includes the government's adoption of a relatively less expansionary or contractionary budgetary policy stance.

Advice 2: It is important that students remember that a knowledge of contemporary economic events and policy initiatives will be necessary for those students seeking to achieve the highest possible score in the examination. With respect to the second part of the question, students must go beyond a description of the impact on inflation. Reference is made in the question to 'price stability', which is a macroeconomic goal of the government, and students will not be able to achieve full marks without demonstrating an understanding of the goal.

Advice 3: While it is important for students to demonstrate an understanding of the key terms within each question, such as budgetary policy, budget balance and price stability in the current question, they should be careful not to spend too much time 'defining' each term. For example, it would be tempting for students to spend considerable time defining both budgetary policy and price stability, and spend a relatively short period of time describing how the relevant initiative actually works to reduce both the budget deficit and inflation, which is essentially the key to answering the question well. This point was made by the Chief Assessor in the 2016 Examination Report, where she said that students need "to spend less time defining key concepts and terms related to the question and more time explicitly and fully answering the specific requirements of the question".

- 0.5 marks for identifying an appropriate initiative
- 0.5 marks for describing how the initiative helps to return the budget to balance
- 2 marks for an accurate explanation of how the initiative (and/or the budget returning to balance) can help to reduce the rate of inflation (see Note 3 below)
- 1 mark for extending the response to the impact on the goal

Sample response: *In recent budgets the government has announced measures that reform the tax system in a way that targets multinational tax avoidance in an effort to force multinational companies to pay tax to the Australian government on profits that have been made in Australia. This includes the introduction of a new Diverted Profits Tax as well as the development of the Tax Avoidance Task Force. This should help to increase government receipts relative to government expenditure over time, which [ceteris paribus] necessarily reduces the budget deficit and helps the budget to return to balance [or surplus].*

To the extent that the initiative helps the government to achieve fiscal consolidation via the implementation of a less expansionary (or contractionary) budgetary policy, the effective increase in tax on (multinational) companies has a negative impact on AD [e.g. companies might decide to reduce their level of investment], which in turn reduces demand inflationary pressures in the economy. This means that, on a

macroeconomic level, AD falls relative to aggregate supply (AS) which exerts downward pressure on prices. This makes it easier for the RBA to achieve its goal of 2 to 3% growth in the CPI on average over time given that the current economic recovery is expected to begin adding to inflationary pressure over the next couple of years.

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

Note 2: Students have the freedom to focus on any specific budget initiatives that have been announced over the past two years. This includes other measures from the revenue side, such as the increase in the Medicare levy and tobacco excise, or measures from the expenditure side, such as cuts to some welfare payments and reductions in spending on tertiary institutions.

Note 3: Those students who argue that the contractionary measure(s) actually make it more difficult for the RBA to achieve its price stability goal (given that inflation is currently below the 2-3% target range) should be rewarded. In this respect, students have the flexibility to argue that the chosen budgetary policy initiative will either help or hinder RBA efforts to achieve price stability. The quality of the response will depend on the arguments use in either approach.

c. Explain how the government can implement welfare reform in an effort to boost the labour force participation rate (LFPR) and aggregate supply. 4 marks

Advice 1: The new Study Design now requires students to demonstrate an understanding of how welfare (and tax) reform policies are designed to influence aggregate supply and living standards. Students needn't be too concerned about the term 'reform'. In the context of VCE Economics, students should simply think of tax or welfare 'reform' as any change that has been made to the tax and/or transfer system. The current question only requires a theoretical response. However, students are encouraged to reference any budgetary policy measures that have been introduced over the past couple of years in an effort to improve the overall quality of their response.

Advice 2: In previous exams, including the 2016 exam, students have performed poorly when attempting to demonstrate an understanding of the LFPR. In particular, students often confuse the LFPR with the term labour force and they struggle to both unpack the relationship between the LFPR and the unemployment rate, as well as to explain initiatives that could be implemented to increase the LFPR. Students should remember that the LFPR effectively represents the labour force (or the actual labour supply) as a proportion of the working age population (or the potential labour supply) and that the government is keen to increase the LFPR in the context of an ageing population. Accordingly, students should be prepared for a question that requires some knowledge of recent or potential policy initiatives that might help to increase the LFPR.

- 1 mark for identifying an appropriate welfare reform
- 0.5 marks for demonstrating an understanding of the LFPR
- 1 mark for linking the reform to a boost in the LFPR
- 0.5 marks for demonstrating an understanding of AS
- 1 mark for linking the reform/rise in the LFPR to a boost in AS

Sample response: *The government can decide to introduce specific measures that increase the incentives for some welfare recipients (e.g. those in receipt of single-parent pensions or disability support payments) to enter or return to the workforce. These measures have been introduced by the federal government in recent budgets [such as the tightening of the eligibility criteria for disability support pensions to ensure that those who are able to participate in the work force are required to do so]. This encourages some welfare recipients to seek employment given that they run the risk of receiving less financial support. This results in an increase in the labour force [or the labour supply] as more people enter the labour market in search of employment, and necessarily raises the LFPR, defined as the labour force as a proportion/percentage of the working age population. With a larger supply of labour in the economy, this improves supply conditions for businesses for two main reasons. First, businesses will have access to more (labour) resources to produce goods and services. Second, the larger labour supply exerts downward pressure on wages, which reduces pressure on the costs of production for businesses. These*

factors will boost aggregate supply because they increase the willingness and ability of businesses to supply goods and services to the economy [and expands the nation's productive capacity].

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

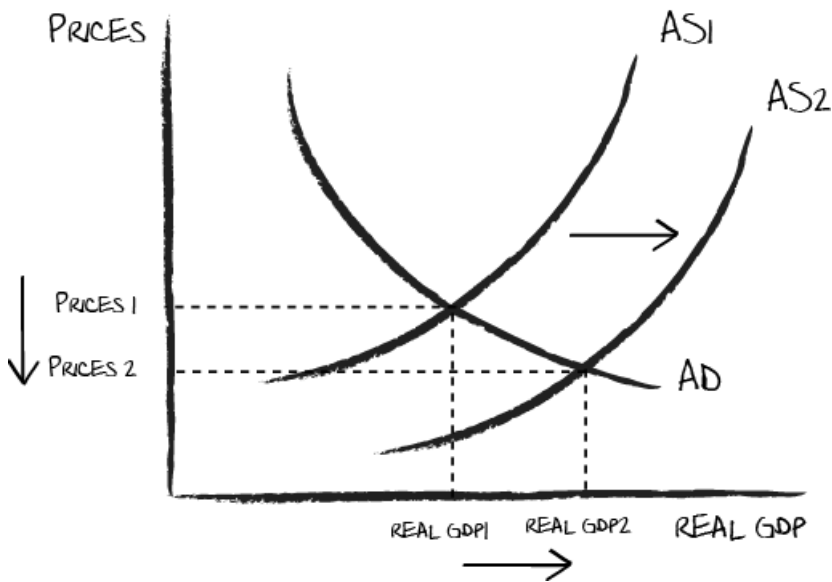
Note 2: Some students are likely to err by saying that 'making it more difficult for the unemployed to access unemployment benefits (Newstart allowance) will help to increase the participation rate'. While the tightening of welfare eligibility can have the effect of increasing the participation rate, this only applies to those welfare recipients not previously in the labour force. This is because, by definition, unemployed persons are already counted as members of the labour force. It is more accurate to say that the measure is more likely to increase the 'intensity of effort' when searching for a job rather than increase the labour force participation rate per se. It is therefore important to focus on how any given welfare reform will incentivise those welfare recipients not currently counted as members of the labour force (e.g. disability support pensioners, recipients of family tax benefits, those in receipt of single parent pensions, etc.) to join or re-enter the labour force by seeking employment.

d. Explain how the provision of research and development grants can raise productivity and affect the achievement of strong and sustainable economic growth. Use the aggregate demand and aggregate supply diagram below to illustrate your response. 6 marks

Advice: The new Study Design requires students to have a knowledge of 'how aspects of budgetary policy are designed to influence aggregate supply and the achievement of the government's domestic macroeconomic goals'. Research and development grants are one of four specific aspects of budgetary policy referred to in the Study Design - the others being 'spending on training and education'; 'subsidies'; and 'investment in infrastructure'. Students should be prepared to answer questions related to one or more of these budgetary aggregate supply initiatives in the examination. In relation to the use of an AD and AS diagram to illustrate the response, students should reasonably expect to interpret and/or use such a diagram to illustrate the impact of changes in macroeconomic variables. This is particularly the case given that reference to both the AD and AS curves are made in Unit 3 of the new Study Design.

- 0.5 marks for demonstrating an understanding of R&D grants
- 0.5 marks for demonstrating an understanding of productivity
- 1.5 marks for establishing an accurate link between R&D grants and productivity
- 1.5 marks for establishing an accurate link between productivity and economic growth
- 1 mark for demonstrating an understanding of the goal of strong and sustainable economic growth
- 1 mark for accurately using the AD/AS diagram

Sample response: *Research and development (R&D) grants are typically funds provided by the government to businesses in order to increase incentives to undertake R&D activities, such as investment into new technologies. Given that the grants will raise the level of R&D expenditure in the economy higher than would otherwise occur, it has the potential to lift productivity (i.e. output per unit of inputs) given that some of the expenditure is likely to lead to new production methods or technologies that help businesses (and the economy) to produce more goods and services with the same or fewer inputs. For example, R&D spending on robotics can help to raise output per worker employed within a range of industries (including manufacturing and mining industries), boosting productivity and reducing the average costs of production for businesses. This will be reflected by a shift to the right of the economy's AS curve, which reduces prices and inflation, and stimulates an increase in AD over time [an expansion along the AD curve] as Australian producers become more (internationally) competitive. This promotes the achievement of strong and sustainable economic growth, given that the rate of economic growth increases in a way that is non-inflationary and therefore more sustainable.*



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

Note 2: For this question, there is no need to explore the reason for the government providing R&D grants to businesses. In other words, students are not required to explain why the market would under-invest in R&D given the incidence of positive externalities associated with R&D expenditure. While reference to the market failure aspect of R&D activities would not undermine the quality of the response, it is unnecessary information in the context of a question that requires students to focus on the 'benefits of R&D'.

e. Explain how the government's current strategy of 'returning the budget to balance' is expected to impact on public debt over time. 3 marks

Advice: In past examinations students repeatedly confused concepts related to 'debt'. For example, students often confused net debt with gross debt; net foreign debt with net government (public) debt; and private sector debt with public (government) sector debt. In the current example, students are required to focus on the impact that fiscal consolidation (or returning the budget to surplus) will have on the (Commonwealth) government's debt over time. While a reduction in the budget deficit (and return to surplus) can have implications for both private sector debt and net foreign debt, this is not the focus of the question. Students should reasonably expect a question on the relationship between the budget outcome and the level of government or public debt given that the new Study Design specifically makes reference to this relationship in the key knowledge points for Unit 4.

- 0.5 marks for simply identifying that the fiscal strategy is likely to reduce public debt
- 0.5 marks for demonstrating an understanding of the government's fiscal strategy
- 0.5 marks for demonstrating an understanding of public debt
- 1.5 marks for establishing the link between the return to surplus and lower levels of public debt

Sample response: *The current government's fiscal strategy to reduce the deficit [and achieve budget surpluses on average over time] is expected to reduce the size of public (i.e. government) debt. This is because once the budget outcome eventually returns to surplus, it means that the government will no longer be required to borrow money from the private sector [e.g. by issuing government bonds] in order to finance a deficit, which of course added to the stockpile of government debt. Instead, budget surpluses will mean that the government can use surplus funds to repay the existing stock of debt, which necessarily leads to a decline in the level of public debt over time.*

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

Note 2: Students cannot be awarded full marks for stating that reducing the size of budget deficits over time will automatically reduce the level of public debt, given that any budget deficit will require funding, adding to the stock of public debt while deficits exist. While it is true that reducing the size of the budget

deficit may reduce the rate of growth in public debt, this is not what the question is asking, given its focus on 'returning the budget to balance.'

f. Outline why a rate of growth in real GDP for 2018-19 that is below the forecast rate of 3% is likely to make it more difficult for the government to reduce the budget deficit. 2 marks

Advice 1: This question requires students to demonstrate an understanding of the cyclical component of the budget (i.e. the operation of automatic stabilisers). This is an area of the course that students continue to find challenging, evidenced by the poor quality of exam responses over many years that test student understanding of automatic versus discretionary stabilisers (i.e. the cyclical versus structural component of the budget). The new Study Design specifically requires students to have an understanding of how automatic and discretionary stabilisers impact on the budget outcome as well as how these stabilisers impact on the economy and the business cycle. The current question relates to the impact that automatic stabilisers will have on the budget outcome.

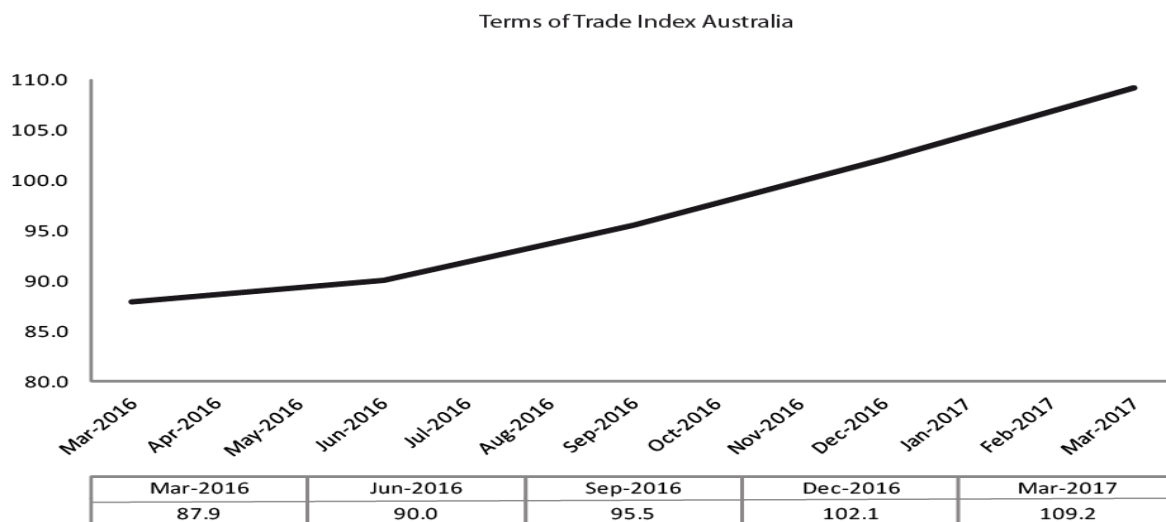
Advice 2: The mark allocation for the question (i.e. 2 marks) should provide students with a guide to the appropriate depth required in the response. It is only necessary to refer to either the impact on government receipts or the impact on government expenditure to achieve full marks. In the event that the question was worth 3-4 marks, then students would be required to refer to the impact on both government receipts and expenditure.

- 1 mark for a superficial outline (e.g. saying that a below-forecast rate of economic growth will result in fewer government receipts and increase the budget deficit)
- 1 mark for a more comprehensive outline (e.g. one that highlights why government receipts will be lower than expected)

Note: No marks should be rewarded for students simply stating that the below-forecast rate of economic growth is likely to make it more difficult for the government to reduce the budget deficit (given that this is stated in the question).

Sample response: *A rate of growth in real GDP below the 3% forecast will result in an automatic reduction in income tax receipts for the government given that production levels in the economy will be lower than expected, which negatively impacts on income levels for households and businesses (and therefore the amount of tax paid to the government). [In addition, it will result in an automatic increase in government expenditure given that income support payments (e.g. Newstart allowance) will be higher than expected.] This necessarily has a negative impact on the budget deficit, causing it to be higher than otherwise and therefore making it more difficult for the government to achieve deficit reduction.*

Question 3 (23 marks)



a. Explain one factor that has contributed to the trend in the terms of trade since early 2016. **3 marks**

Advice: Questions related to the terms of trade, either in terms of a definition or the causes or effects of a change, regularly cause students problems in examinations. Students will typically confuse the terms of trade with the trade weighted index (TWI) and/or inappropriately define the terms of trade as the *value* of exports over the *value* of imports (or even exports over imports). Most recently, in the 2016 examination, students were provided with a chart showing the decline in the terms of trade over the preceding two year period and they were asked to outline a factor that 'might explain the trend' for 2 marks. Too many students could not demonstrate an adequate understanding of the terms of trade and therefore could not achieve what should have been a relatively easy 2 marks. In addition, many students were unwilling or unable to move beyond a simple outline that the terms of trade fell because of a fall in export prices. Instead, students were expected to delve deeper and provide a possible or likely reason for the fall in export prices over the period (such as an increase in the global supply of commodities). In the current example, the scenario has been reversed (i.e. the terms of trade has recovered over 2016-17) and the mark allocation is 3 marks. Accordingly, students should expect to significantly unpack the explanation for why the terms of trade increased over the past year.

- 0.5 marks for demonstrating an understanding of what is meant by the terms of trade
- 0.5 mark for accurately noting that the trend has increased since March 2016
- 1 mark for identifying a rise in export prices (or the fall in import prices) as being the likely cause
- 1 mark for highlighting a likely reason for the higher export prices or lower import prices

Sample response: *The terms of trade (prices received for exports divided by the prices paid for imports) has trended upwards from March 2016. This is primarily due to the resurgent growth in the global demand for key Australian commodities such as iron ore, coal and natural gas which has pushed up the global price of these key commodities and therefore resulted in a higher terms of trade as Australian miners have been receiving higher prices for these exports.*

Note 1: There is no requirement for students to spend time describing the trend in the terms of trade using the figures, nor the effects of the rise in the terms of trade. For this question it is sufficient to simply note that the terms of trade has increased over the past year before going on to provide a likely explanation.

Note 2: Students should be rewarded if they refer to possible global supply restrictions [e.g. due to weather-related events such as Cyclone Debbie] as the factor driving up export prices.

b. Outline why the recent movement in the terms of trade is likely to reduce the current account deficit and help to achieve full employment. 5 marks

Advice: Students typically perform poorly on questions related to Australia's external sector and the balance of payments. In particular, students often confuse concepts related to the balance of payments, such as mistaking the Balance on Trade with the terms of trade or the trade weighted index, and they fail to adequately explain how components within the balance of payments are affected by the movement in economic variables. In the 2016 exam for example, students struggled to explain how the fall in the terms of trade up to 2016 impacted on the current account. This point was made by the Chief Assessor in the 2016 examination report, where she said students needed *'to develop clearer understanding of the meaning of the terms of trade and the relationship between the terms of trade and the balance of payments on current account'*.

It is therefore not unreasonable to expect this type of question to resurface on the 2017 exam.

- 1st mark for a superficial outline of how the higher TOT reduces the CAD (e.g. saying that the higher terms of trade – which included higher export prices - resulted in higher export values which boosted the balance on merchandise trade and reduced the CAD)
- 2nd mark for a more detailed outline that extends the response to describe why export values increased and how the BOMT improved/CAD fell.
- 3rd mark demonstrating an understanding of the full employment goal
- 4th mark for a superficial outline of how a higher terms of trade helps to achieve full employment (e.g. saying that the higher TOT results in more revenue which means that commodity exporters are likely to employ more workers)
- 5th mark for a more detailed outline of how a higher terms of trade helps to achieve full employment

Sample response: *The higher prices received for Australia's commodity exports (which contributed to the higher TOT) over the past year meant that mining companies in particular received more sales revenue (i.e. value) from any given volume of exports that they shipped to world markets. This is likely to increase the total value of commodity exports that are recorded in the Balance on Merchandise Trade (BOMT) component of the current account, increasing total credits within the account relative to debits, pushing the account towards surplus (or reducing the deficit). Given that the BOMT is one of four components of the current account, any improvement in the BOMT will, ceteris paribus, result in a smaller current account deficit.*

A higher terms of trade (TOT) ultimately results in an increase in national income given that the income commodity exporters increases. This income flows through the economy in the form of profits (that are distributed to shareholders) as well as increased wages that are paid to workers and other stakeholders in the (mining) industry. To the extent that the income is spent by income earners (e.g. households and businesses), including the increased investment expenditure that is likely to take place in the relevant export industry, it adds to aggregate demand and increases real GDP. This will ultimately lead to an increase in the demand for labour, creating employment and helping to reduce the rate of unemployment closer to the government's full employment goal of approximately 5% unemployment (the lowest sustainable rate before inflationary pressures emerge).

c. Describe how an increase in the terms of trade can result in a lower inflation rate. 2 marks

Advice: Students are accustomed to thinking in terms of a 'positive' relationship between the terms of trade and the inflation rate, in the sense that an increase in the terms of trade will most likely cause the rate of inflation to increase and a fall in the terms of trade helps to reduce the inflation rate. This is indeed the typical relationship that occurs when changes in the terms of trade are driven primarily by changes in export prices, which is typically the case for Australia. However, there have been periods in the past when a higher terms of trade has helped to reduce the inflation rate. This occurs when the higher terms of trade has been caused by lower import prices. Those students who have a sound grasp of the 'make-up' of the terms of trade should have few problems responding to this question.

- 1 mark for a superficial description (e.g. saying that the inflation rate will fall if the higher terms of trade is caused by lower import prices)
- 1 mark for a detailed description that extends the response to describe how lower import prices lead to a lower inflation rate

Sample response: *This can occur if the increase in the terms of trade has been a result of lower import prices rather than higher export prices [e.g. if the prices received for exports remains unchanged over a given period and the prices paid for imports falls]. This is likely to result in a lower inflation rate because many imports are consumer items that directly feed into the CPI, and lower import prices helps to reduce the rate of growth in the CPI over time (i.e. reduces the inflation rate). [In addition, lower import prices help to reduce costs of production for Australian businesses given that the bulk of Australia's imports are intermediate or capital goods, which further helps to reduce inflation over time.]*

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

d. The Reserve Bank of Australia (RBA) is keen for Australia to avoid a high rate of inflation for a number of reasons. Outline how inflation can have a negative impact on one of the following:

- **International competitiveness or**
- **Purchasing power**

2 marks

Advice: The new Study Design specifically lists a number of consequences associated with a high inflation rate. These factors are listed as follows: the erosion of purchasing power, redistributive effects, resource misallocation, savings and investment, and international competitiveness. The current question provides students with a choice of consequences to outline, but they might not be afforded this luxury in the examination. Students should therefore be prepared to demonstrate an understanding of each of the negative consequences stemming from inflation that fall under each of the descriptions/headings above.

- 1 mark for a superficial outline (e.g. saying that high inflation rates will erode Australia's international competitiveness)
- 1 mark for a detailed outline that extends the response (e.g. by explaining how Australia's international competitiveness is eroded by high inflation rates)

Note 1: In the event that a student outlines the impact on both international competitiveness and purchasing power, only the first one should be assessed.

Sample response: *A high rate of inflation [on that is above 3% per annum] will tend to reduce the international competitiveness of Australia's tradables sector [i.e. exporters and import-competing businesses], particularly if Australia's inflation rate is above that experienced in other countries. This occurs because higher domestic prices ultimately feed into higher export prices (e.g. input costs for exporters will increase) which makes exports less price competitive compared to exports from those countries which have a lower rate of inflation. In addition, higher domestic prices result in Australian products becoming less competitive against imports coming from those countries with lower inflation rates.*

Or

High rates of inflation will also erode the purchasing power of money (i.e. reduce its real value) and therefore negatively impact on the material living standards of many Australians. Those Australians whose incomes are unable to increase in line with the rate of inflation (e.g. low skilled workers with minimal economic bargaining power in labour markets) will experience a decline in their 'real wage' (or 'real income') and they will be unable to purchase as many goods and services as before. As a consequence, the material standard of living will decline.

Note 2: For this question, for the response outlining the impact of high inflation on international competitiveness, there is no need for students to further extend the response by making reference to the negative impact on other variables such as economic growth, employment, living standards, etc.

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

e. Describe the RBA's likely response in the event that Australia's annual rate of inflation increases from 1.9% to 3.5%. In your answer, make reference to both the target cash rate (TCR) and the stance of monetary policy. **3 marks**

Advice: Students should be careful when answering questions related to monetary policy. There is often a tendency for students to go beyond the scope of the question and note down all they know about monetary policy. For example, for the current question, some students will be tempted to talk about the process by which the RBA tightens monetary policy (e.g. via domestic/open market operations) in order to achieve a less expansionary stance, as well as elaborate on the detail of how tighter monetary policy actually works to reduce AD (e.g. they will unnecessarily explain one or more transmission mechanisms). A careful reading of the question, as well as taking into account the mark allocation, should reveal that students are not being asked to demonstrate an understanding of either open market operations or transmission mechanisms. Rather, they are asked to focus on RBA decision making relating to the appropriate monetary policy setting in light of new statistics coming to hand.

Note 1: Those students who do elaborate on a market operations and/or transmission mechanisms should not be penalised.

- 0.5 mark for identifying that the RBA will adopt a less expansionary stance
- 0.5 mark for making appropriate reference to the TCR increasing
- 2 marks for an appropriate justification for the RBA's response

Note 2: Students should not achieve full marks if they refer to the RBA adopting a contractionary or restrictive stance, given that this would involve the RBA increasing the TCR from its current level of 1.5% to more than 3.5% (monetary policy neutrality). In particular, students should not be rewarded if they refer to a small increase in the TCR from 1.5% (to perhaps 1.75% or 2%) as being evidence of the RBA adopting a restrictive monetary policy stance.

Sample response: *The RBA is likely to respond by adopting a less expansionary stance by tightening monetary policy and increasing the target cash rate above the current 1.5% rate [perhaps by 25 basis points to 1.75%]. This will be designed to reduce demand inflationary pressures in the economy and ultimately force inflation back into the 2-3% target range. The RBA is likely to respond in this way because a 3.5% rate of inflation is considered excessive [and results in the negative consequences outlined in the previous question] and clearly beyond the upper band of the RBA's target range. To reduce the rate of inflation, the RBA's primary weapon is its ability to manipulate interest rates in the economy, whereby an increase in the TCR will ultimately flow on to raise general interest rates, which in turn reduces growth in AD and therefore helps to contain (demand) inflationary pressures that have re-emerged in the economy.*

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

f. Outline how immigration can help to lift productive capacity and reduce inflation. **3 marks**

Advice: The new Study Design still requires students to understand the effects of immigration policies (on labour markets/aggregate supply and the achievement of macroeconomic goals). When discussing the impact of immigration on aggregate supply or productive capacity and the rate of inflation it is best to focus on skilled immigration as it facilitates a focus purely on the supply side effects.

- 0.5 marks for demonstrating an understanding of (skilled) immigration
- 0.5 marks for demonstrating an understanding of productive capacity
- 1 mark for an outline of how skilled immigration can boost productive capacity

- 1 mark for an outline of how skilled immigration/larger productive capacity reduces inflation

Sample answer: *The ability to source skilled foreign labour (i.e. skilled immigration) increases business access to scarce labour resources as well as boosting productivity [given that skill levels within enterprises increases], which increases the ability of businesses to produce output. In addition, businesses will be able to source skilled labour at lower rates of pay (as increased labour availability places downward pressure on wages). The combined effect of greater productivity and relatively lower labour costs helps to reduce the costs of production for Australian businesses and increases the willingness and capacity to supply goods and services to the market. This rise in productive capacity, and the associated fall in production costs, enables businesses to reduce prices [or refrain from raising prices] in order to increase competitiveness, which in turn helps to reduce the rate of growth in prices (i.e. inflation)*

g. Explain how a loosening of monetary policy overseas (e.g. in the USA) might have a negative impact on the effectiveness of monetary policy in Australia. 3 marks

Advice: The new Study Design specifically requires students to have knowledge of, and evaluate, the strengths and weaknesses of using monetary policy to achieve the government's macroeconomic goals. It also requires them to understand the impact of relative interest rates on the exchange rate. A loosening of monetary policy overseas is one contemporary example which highlights the limitations of monetary policy in Australia to control all key variables (in this case the exchange rate) that impact on the effectiveness of any given monetary policy setting. For a question such as this, which relates to interest rate differentials between Australia and other countries, it is useful to step out the response in a logical manner. First, examine the impact on Australia's exchange rate. Second, examine the implications of a changing exchange rate on key macroeconomic variables for Australia (i.e. economic growth and inflation). Third, examine how this impacts on the effectiveness of any given monetary policy setting (e.g. does it support or hinder RBA efforts to expand the economy in the current climate).

- 1 mark for highlighting the impact on the exchange rate via the exchange rate differential/change in relative interest rates
- 1 mark for highlighting the impact on economic growth
- 1 mark for linking this to the reduced effectiveness of the current monetary policy stance

Sample answer: *A loosening of monetary policy in the USA results in lower USA interest rates which ultimately leads to an appreciation of the Australian dollar. This occurs because, ceteris paribus, Australian interest rates increase relative to US rates, which makes debt investment in Australia a more attractive investment proposition for foreigners. Funds therefore flow into Australia chasing these higher returns (i.e. capital inflow), which increases the demand for Australian dollars on foreign currency markets and therefore raises the value of the Australian dollar exchange rate (AUD). This appreciation of the AUD reduces international competitiveness and negatively impacts on AD and economic growth. This works against the efforts of the RBA to stimulate the economy [evident in the current highly expansionary monetary policy settings] and compromises the effectiveness of the RBA's current monetary policy stance.*

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

h. Outline why monetary policy might be more effective than budgetary policy in stimulating the economy. 2 marks

Advice: The new Study Design specifically requires students to develop the key skill of evaluating the strengths and weaknesses of aggregate demand policies (i.e. monetary and budgetary policies) in achieving the government's domestic macroeconomic goals. Students should therefore be prepared to compare the relative strengths and weaknesses of each policy. Given that the instructive verb/command term for this question is outline, and the mark allocation is only 2 marks, students are not expected to cover more than one factor or reason in support of the contention that monetary policy can be more effective in stimulating the economy.

- 1 mark for a superficial outline (e.g. MP is more effective because the RBA is independent).

- 2 marks for a more comprehensive outline (e.g. elaborating on why this independence can make MP more effective than BP)

Sample answer: *To stimulate the economy, monetary and budgetary policy will typically adopt a more expansionary stance as evidenced by a loosening of monetary policy (i.e. a reduction in interest rates) and an increase in the budget deficit (or a reduction in the surplus). Monetary policy can be more effective because monetary policy decisions are made by the RBA, which is independent of the government of the day. This helps to ensure the policy decisions are made solely in the interests of the achieving the economic goals, unlike budgetary policy, which is controlled by the government of the day and can result in policy decisions that are more concerned with re-election (e.g. vote buying) rather than what is in the best interests of the economy.*