

## Suggested answers to Unit 1 practice exam 2012

### SECTION A—Multiple-choice questions

1C	2D	3D	4A	5C	6D	7A	8D	9C	10D
11A	12C	13B	14A	15D	16B	17B	18A	19D	20A

### SECTION B—Short-answer questions

#### Question 1

**a. Define the economic concept of opportunity cost. (1 mark)**

Opportunity cost arises because of the problem of relative scarcity, which means that we have to make choices between alternative ways of using our limited resources. Opportunity cost refers to the cost of the next best alternative forgone.

**b. Describe two characteristics of a perfectly competitive market. (4 marks)**

The perfectly competitive market is a theoretical model of an economic system where the market alone determines how resources are allocated, the private sector determines how the basic economic questions are answered, and there is entirely private sector ownership of resources. The government's role is simply that of maintaining law and order.

*Students could describe any of the above in more detail or any of the following characteristics:*

- *Total consumer sovereignty*—consumers alone determine *what* goods and services are produced based on their purchasing patterns.
- *Homogenous products*—very high levels of competition occur when producers sell identical/homogenous products without the distortions of branding, advertising and other marketing tools to persuade consumers.
- *Resources are totally mobile*—no institution or group can influence or block where or how resources are shifted to and from. Owners of resources have control of this decision-making based on the price mechanism's signals.
- *No barriers to entry or exit by firms*—to ensure that perfect competition exists, firms need to be able to set up and compete if they choose to enter a market, and existing firms need to be able to leave the market if they so desire.
- *Firms are the same size and all firms are price takers*—no one firm can influence price through their size as all firms are competing equally. All firms are price takers.

**c. Explain one reason why the government might intervene in markets to increase the level of competition in the Australian economy. (3 marks)**

While some markets in the Australian economy are very competitive, many are not. When firms in an industry have market power (e.g. monopolies and oligopolies) they have the ability to influence price and/or supply. Hence, the level of competition is restricted and disadvantages consumers. In order to increase the level of competition and promote a more efficient allocation of resources, the Australian Government might intervene. Because firms with market power are price makers rather than price takers, they manipulate prices with self-interest in mind, negatively impacting on consumer choices and prices. The government will intervene to lessen this occurrence.

- d. Define the term ‘market failure’. Use the example of global warming to explain how the government can intervene to try and correct market failure. (3 marks)

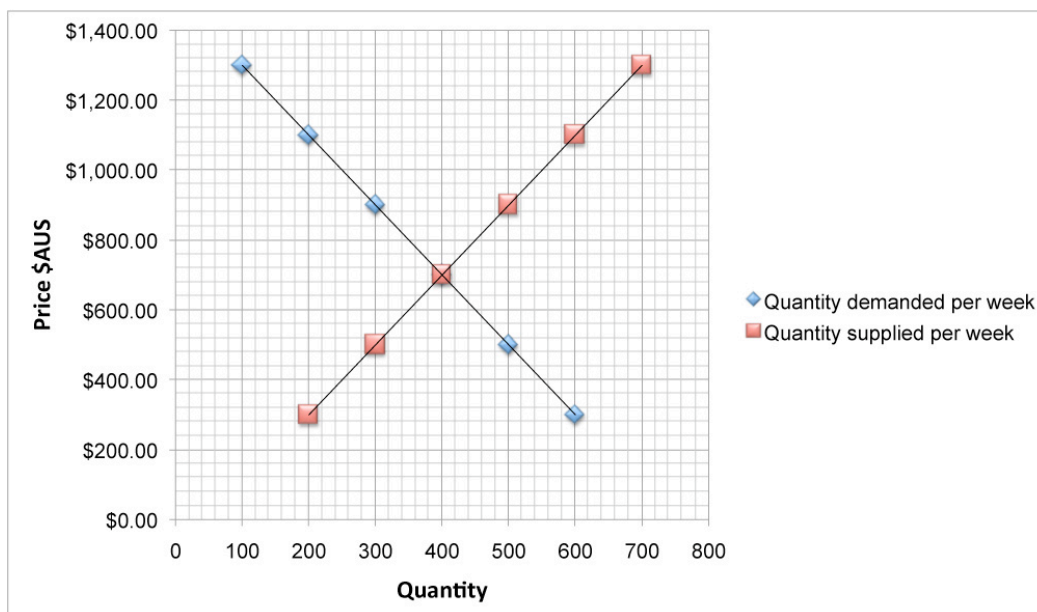
Market failure occurs when due to the actions of consumers and producers the market fails to allocate resources efficiently. Global warming is an example of market failure as it represents a negative externality, that is, a situation where the actions of consumers and producers around the world have harmed the environment and imposed a cost on third parties (in this case, the general population). The cost of emitting greenhouse gases in the process of production or consumption means that society now and in the future bears a huge cost—that of global warming. The government can try to rectify this market failure through intervening in the market to put a price on carbon emissions. The implementation of a carbon tax is one way to indicate to producers the need to change their behaviour. By pricing something that was previously not priced, the cost of production for Australia’s 500 largest polluters will rise if they do not cut their carbon emissions. The incentive then exists for firms to change their methods of operation, to switch to greener energy, low-polluting technologies and more efficient forms of production.

- e. Businesses can use a number of strategies to increase their market share and gain a competitive advantage. Discuss how predatory pricing could be used to maximise profits. (3 marks)

Predatory pricing occurs when firms sell goods and services at such a low price that they force their competitors to close because they are unable to compete. It is an anti-competitive and illegal action by firms. Using very low prices, large firms can cut their profit margins in order to attract customers, but small firms cannot do this for an extended period of time; and so the actions of large firms force small firms to close. This then lessens competition with large firms dominating the market for that good, enabling them to drive up prices once their smaller competitors have left the industry. Large firms then reap the benefits of greater revenue and profits as a result of their anti-competitive actions. The enormous market power of Coles and Woolworths in their supermarket duopoly has seen the recent price wars (on milk, fruit and vegetables and alcoholic drinks) have a detrimental impact on smaller competitors.

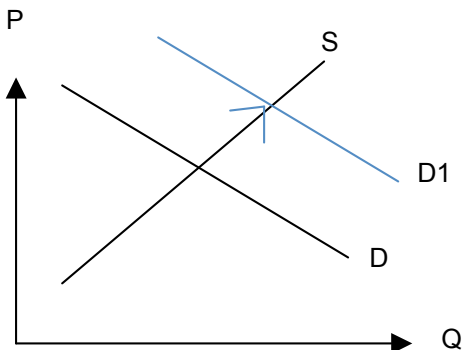
**Question 2**

- a. Graph the above information onto the graph ‘paper’ below. Be sure to label the graph and both axis correctly. Mark in the equilibrium price and quantity. (4 marks)



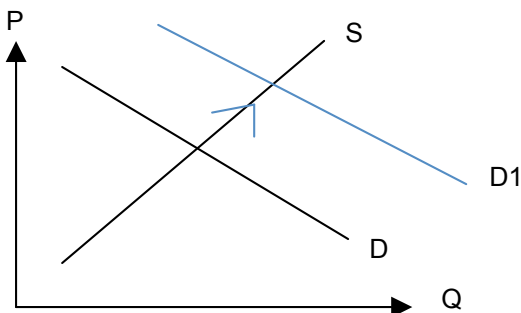
b. For each of the following scenarios, mark on the graph and explain the impact on the equilibrium price and quantity of bicycles sold in Melbourne. (12 marks)

i. The price of public transport increases by 30 per cent.



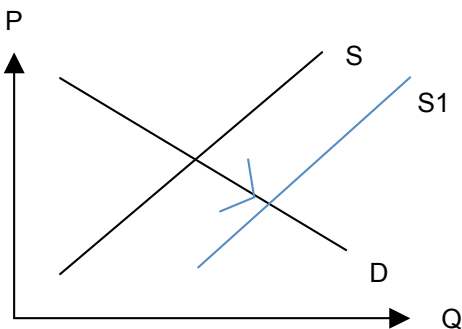
If the price of public transport increases by 30 per cent, the demand for bicycles will rise, as it is an alternative mode of transport. This would shift the demand curve to the right due to increased demand for bicycles as a result of the condition change. This shift to the right results in a higher equilibrium price and quantity for bicycles, and due to this higher price an increased willingness to supply—shown by an extension in supply.

ii. The Melbourne City Council decides to expand the number of bicycle paths in Melbourne.



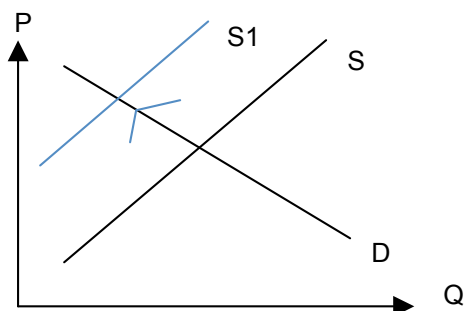
Bicycle paths and bicycles are a complementary good and service. The decision to expand the number of bicycle paths in Melbourne will encourage more people to ride bicycles and therefore the demand for bicycles will increase. This would shift the demand curve to the right due to increased demand for bicycles as a result of the condition change. This shift to the right results in a higher equilibrium price and quantity for bicycles and due to this higher price an increased willingness to supply—shown by an extension in supply.

iii. The Australian dollar continues to appreciate against major currencies.



Most bicycles are foreign made and so if the Australian dollar is appreciating it will be cheaper for businesses to import bicycles. This would shift the supply curve to the right. This condition change means that the equilibrium price of bicycles would decrease and the equilibrium quantity would increase, as consumers are willing to buy more bicycles at a lower price. There is an extension along the demand curve.

**iv. Labour costs rise for bicycle manufacturers.**



Labour costs are an input of production and would affect the overall production costs of businesses. There will be a shift to the left of the supply curve, reflecting higher production costs and therefore a decreased willingness to supply. This will cause the equilibrium price to rise and the level of demand to fall, indicated by the contraction in demand. The equilibrium quantity would decrease.

## SECTION C—Written responses

### Question 1

**a. Define what is meant by ‘strong and sustainable economic growth’. (2 marks)**

The Australian Government has a number of key economic goals; one of these is the achievement of strong and sustainable economic growth. This means that the rate of economic growth should be fairly steady over the economic cycle (around 3 to 4 per cent). This should not put undue pressure on inflation and the current account deficit (CAD), nor will it be too low as to cause unemployment to rise too much. Furthermore, to sustain economic growth there needs to be consideration of the environment and that increased production is achieved through sustainable resource use.

**b. Explain two limitations of GDP as an effective measure of economic growth and living standards in Australia. (4 marks)**

GDP is perhaps the most widely used measure of economic growth in Australia; although it is an effective measure of growth, it has some limitations. Living standards refer to how well off we are as a nation and can be examined from a material and non-material perspective. GDP as a measure of economic growth and living standards is limited because it does not accurately measure the quality of production, the distribution of production, the negative externalities occurring as a result of production, and a range of other factors.

One limitation is that GDP underestimates the rate of growth because the definition does not include non-market production; that is, goods and services produced but not sold in the market. This is evident within the household sector where production clearly occurs by those living in the household, such as cooking, cleaning, gardening, maintenance and repairs. This limitation also applies when no record of production exists because of cash transactions and illegal production in the economy. The latter two examples can cause an underestimation of production because there are no records of the production having occurred.

Another limitation of GDP as an effective measure of economic growth is that it is not a true or good indicator of the quality of goods and services produced. While the value of GDP may rise, higher prices do not necessarily reflect better quality production.

- c. **Select one aggregate demand factor and one aggregate supply factor from the list below and explain how each would affect the rate of economic growth in Australia. (4 marks)**
- i. **recession in Europe and Japan** – AD factor
  - ii. **increased consumer confidence** – AD factor
  - iii. **skills shortage in Australia** – AS factor
  - iv. **lower interest rates** – AD and AS factor

*Aggregate demand factors:*

If *Europe and Japan were in recession* their demand for our exports would decrease. This would mean that AD would fall and therefore our rate of economic growth in Australia would slow or decrease. Our interdependence as trading nations means that the rate of economic growth in other countries has a direct effect on our level of economic activity.

*Consumer confidence* reflects the state of optimism or pessimism by households and is reflected in their decision-making about future spending in the economy. Higher levels of consumer confidence reflect a more positive future outlook and will mean greater confidence of consumers about their income and employment prospects. Increased consumer confidence results in increased private consumption expenditure, causing AD to increase and therefore economic growth to rise.

*Interest rates* (the price of money—earned for saving and paid for borrowing) represent a demand-side factor and a supply-side factor. On the demand side, if interest rates are lowered it will encourage consumers and businesses to borrow, assist existing borrowers by reducing their debt servicing costs, and encourage spending and investment in the economy. If private consumption expenditure and private investment expenditure increase, AD will rise and cause economic growth to increase.

*Aggregate supply factors:*

*Interest rates* can also be seen as a supply-side factor. Most businesses have loans and so if interest rates fall, the cost of debt servicing decreases. This will help lower the cost of production for firms and increase their willingness to supply and lift production. This causes economic growth to increase.

A *skills shortage* in Australia will thwart increased production, as there are not enough skilled workers to hire. Further to this, firms may face higher labour costs through having to pay higher wages to attract workers. The lack of available workers with the right skills and impending higher labour costs both cause production levels to decrease on the supply side. This will have a negative impact on economic growth.

**d. Distinguish between the following pairs of terms. (4 marks)**

**i. Material and non-material living standards**

Material and non-material living standards refer to different aspects of how well off a country is. The desire is always to improve our living standards. These two aspects can be compatible or conflicting.

Material living standards refers to how well off we are as individuals through our access to goods and services and as a nation in terms of how much is produced.

Non-material living standards refers to intangible aspects of our life and whether our quality of life is improving, for example our happiness, political, economic, religious freedom, social cohesion, and so on.

**ii. Non-market production and market production**

Production refers to the manufacture/making of goods and services.

Non-market production refers to goods and services not sold in the market for a price.

These types of goods and services are typically performed in the home and done as chores, for example householders' cooking, cleaning or gardening for themselves or their family. No payment is involved despite the fact that production has occurred. Non-market production also refers to illegal production that has no officially recorded price and value, as well as production done for cash, where no records are kept. There is no contribution to GDP.

Market production refers to goods and services produced and sold in the market. Exchange occurs for a price and accounting records show the exchange. This production is recorded in GDP.

**e. Explain how the introduction of a carbon tax might have a negative impact on the level of economic growth in Australia, in the short-term. (3 marks)**

A carbon tax puts a price on releasing polluting greenhouse gas emissions into the atmosphere and aims to deter firms from continuing to use production methods that damage the environment. While a carbon tax should reduce emissions, it might also have a negative short-term effect on Australia's economic growth. As Australia's new carbon tax adds a cost of \$23 per tonne of carbon dioxide emitted, firms will have this additional cost of production to deal with in the short-term. Firms will have to pay for their emissions as well as bear the costs of moving to other lower emission methods of production. These added costs are supply-side factors that will raise production costs, lower firms' willingness to supply and therefore lower economic growth in the short-term.

**f. 'Strong and sustainable economic growth needs to focus on minimising negative externalities'. Discuss *one* government policy initiative that may help promote sustainable development. (3 marks)**

If strong and sustainable economic growth can minimise negative externalities, one benefactor will be the natural environment now and into the future.

One government initiative that may help sustainable development is the introduction of a carbon tax. The introduction of a carbon tax aims to reduce the emission of greenhouse gas into the atmosphere. The tax will give firms the incentive to invest in renewable energy that is less polluting and more efficient. This would help the environment and reduce negative externalities.

Another government policy initiative that may help promote sustainable development is national renewable energy targets. The government's target is that 20 per cent of Australia's electricity supply comes from renewable sources by 2020. This requires spending on research and development, new technologies and financial assistance.

Some other government programs are the Clean Technology Program and the Carbon Farming Initiative. Both programs aim to provide funding over the next five to 10 years to encourage firms to invest in energy-efficient capital equipment and production processes, and farmers to invest in research and development and projects to find new methods of carbon storage and ways of improving land management while reducing land pollution.

**SECTION D—Written responses**

**Question 1**

**a. Outline one reason for the inequitable distribution of income and wealth in Australia. (2 marks)**

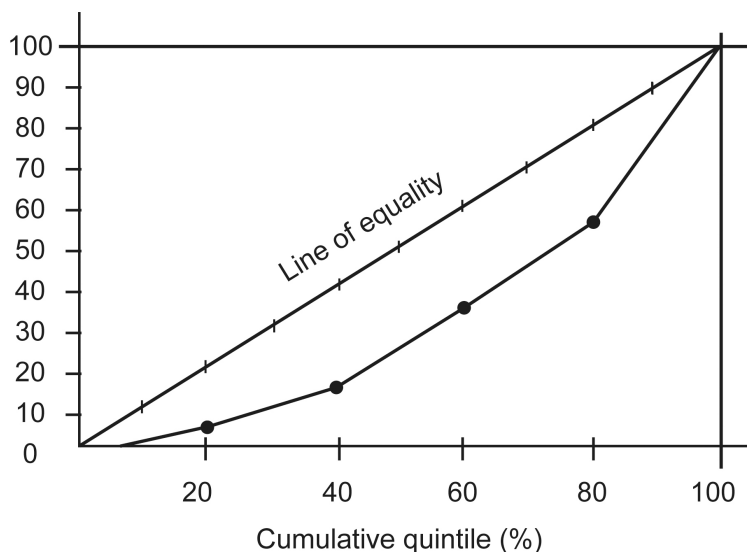
An inequitable distribution of income refers to the fact that the distribution of income as it currently stands is unfair and that the aim is to try and reduce the gap between rich and poor. There are many reasons for this situation.

*Students could discuss one of the following:*

- Different levels of educational attainment—usually the higher your educational level, the higher your income-earning potential.
- Family income—some people are born into families with wealth and therefore have higher income levels and opportunities available to them.
- Not everyone can find employment—without employment, income is limited.
- Scarce skills and talents—those with skills/talents in high demand have much greater earning capacity.
- Economic conditions overseas—weak economies result in loss of jobs and loss of income here. Australia is currently affected by weaker global conditions and those employed in the export sector would be facing difficulties because of weaker overseas demand. At the same time, a strong currency means firms are finding it difficult to compete with cheaper imports and thus cutting back or closing their businesses.

**b. Use the 2009–10 weekly income data to draw and fully label a Lorenz curve. (3 marks)**

Share of mean income (%)



**c. Define what the Gini coefficient is and describe the trend in the Gini coefficient since 2003–04. (3 marks)**

The Gini coefficient is a measure of the degree of income or wealth inequality. It is a coefficient that shows how small or great the degree of income/wealth inequality is. The closer the coefficient is to zero, the higher the degree of income/wealth equality. The closer the coefficient is to one the lower the degree of income/wealth inequality. Between 2003–04 and 2007–08 the Gini coefficient increased, which therefore reflects rising inequality in the distribution of income, while in 2009–10 there was some improvement in the distribution of income as shown by a lower Gini coefficient of 0.328.

**d. Discuss how *one* of the following government policies could impact on the distribution of income and/or wealth in Australia. (2 marks)**

**i. the government introduces a carbon tax**

The introduction of a carbon tax would impact negatively on the distribution of income in Australia as a carbon tax increases the cost of production for firms, who in turn will pass on some of this cost to consumers in the form of higher prices. The cost of living will definitely rise and put pressure on low-income earners. To counteract this, the Australia Government is going to provide some household assistance to support low-income and middle-income earners, pensioners and recipients of social welfare payments.

**ii. the government means tests the 30 per cent private health insurance rebate**

The introduction of a means test introduced on the 30 per cent private health care insurance rebate would mean that those deemed to be high-income earners would become ineligible for the government rebate. The aim of any means test is to target assistance to those really needing it. This aims to make the distribution of income more equitable.

**iii. the government raises the tax-free threshold for personal income to \$25 000**

Raising the tax-free personal income threshold to \$25 000 benefits all wage and salary earners but, in particular, assists those who are low-income earners, as they will now no longer be taxed on their earnings until their income is above \$25 000.

## Question 2

**a. Define what is meant by the economic goal of low inflation. (2 marks)**

Inflation erodes purchasing power and increases the cost of living.

The government's goal of low inflation means having a situation where general price increases are kept between 2 to 3 per cent on average over the business cycle.

**b. Examine *one* weakness of using the CPI as the main measure of inflation in Australia. (2 marks)**

The ABS measures inflation and while the CPI is the most common measure of inflation, it does have some limitations.

*Students could examine one of the following weaknesses:*

- The CPI measures the prices of around 100 000 goods and services typically purchased by metropolitan households. Not all goods and services are included in the regimen.
- Only capital cities prices are gathered for the CPI and yet non-metropolitan areas often have much higher prices.
- The regimen of 100 000 goods and services is not always a good indicator of typical goods and services consumed, as it can date. The ABS renews the regimen every five years only, so it might exclude important consumer items.



**c. Explain how *one* of the following factors is likely to put upward or downward pressure on inflation in Australia. (3 marks)**

**i. the Australian dollar appreciates significantly – downward pressure**

If the Australian dollar appreciates significantly it means that exports will be more expensive for foreigners and imports will be cheaper for Australians. This has the beneficial effect of putting downward demand and cost pressure on inflation in Australia.

Because exports are relatively more expensive, the lower international demand for them will decrease AD and reduce demand inflationary pressure. Further to this, producers reliant on imported components for production will have cheaper prices and lower costs of production. This supply-side factor puts downward pressure on cost inflation.

**ii. weak economic growth in Europe and Japan – downward pressure**

Weak economic growth in Europe and Japan will result in less demand for our exports due to their slowing economies. This lower demand for exports decreases AD and puts downward pressure on inflation in Australia.

**iii. the introduction of a carbon tax – upward pressure**

The introduction of a carbon tax would impact negatively on inflation in Australia as a carbon tax increases the cost of production for firms, which in turn will pass on some of this cost to consumers in the form of higher prices. Higher cost inflation results.

**d. Australia has a low inflation rate, according to the Reserve Bank of Australia (RBA). A recent RBA *Statement on Monetary Policy* reads: ‘In underlying terms inflation is forecast to remain around the midpoint of the target range for most of the next couple of years ...’ (*Statement on Monetary Policy*, RBA, February 2012)**

**Explain how a low inflation rate would impact on *one* of the following. (3 marks)**

**i. the value of Australia’s exports**

A low inflation rate in Australia would be beneficial for our export sector, as it would make our exports more internationally competitive. As a result, demand for Australia’s exports should increase, which would help to decrease the CAD. It would also create increased employment opportunities in this sector, increasing the opportunity to earn factor incomes and help raise national income and living standards.

**ii. the distribution of income in Australia**

A low inflation rate is beneficial for Australia for a number of reasons and assists in making the distribution of income more equitable.

- Exports are more internationally competitive causing export demand to increase. More job opportunities are created in the export sector, raising income levels and helping to lessen income inequity.
- A low inflation environment will help ensure that investment in productive resources, rather than non-productive resources, is maintained. This creates employment and income, helping to reduce income inequity.
- Low inflation means that people’s real incomes are growing and that living standards aren’t eroded by excessively rising prices. Everyone benefits from this, including those dependent on social welfare payments.