LCCC EXAMS – 2020 ECONOMICS
YEAR 11 EXAMINATION MARKING GUIDELINES

Section I

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

Section II

Question 21(a) *Outcomes assessed: P1*

Criteria	Marks
• Correctly defines the term "interest rates"	1

Answers could include: Interest rates are the cost of borrowing money in financial markets usually expressed as an annual percentage of the amount borrowed. To the lender and saver the interest received can be seen as the compensation for foregoing the use of their funds for a period of time. For the borrower interest can be seen as the cost of borrowing money.

The level of interest rates depends largely on the level of risk involved to the lender, the term of the loan and the amount borrowed. The higher the risk, the higher the interest rate. A major risk comes from inflation, which erodes the value of money over time. If inflationary expectations are high the nominal interest rate that is the stated interest rate, will be higher. The real interest rate received by the lender equals the nominal interest rate minus the level of inflation.

Question 21(b) *Outcomes assessed: P1, P2, P3, P8, P10*

Criteria	Marks
• Correctly outlines how interest rates are determined	2
• Demonstrates a limited understanding of how interest rates are determined	1

Answers could include: Interest rates are largely market determined through the interaction of the demand and supply of loanable funds. If the demand for loanable funds increases this will lead to a rise in interest rates. If the demand for loanable funds decreases this will lead to a fall in interest rates. If the supply of loanable funds increases this will lead to a fall in interest rates. If the supply of loanable funds decreases this will lead to a rise in interest rates.

In the Australian economy interest rates are also influenced by the official cash rate which is the overnight interest rate in the cash market set by the Reserve Bank of Australia (RBA). The RBA sets the cash rate at a level that will achieve its monetary policy objectives in the current economic environment. The cash rate is determined by the demand for and supply of money in the cash market. In order to maintain the cash rate at the desired level the RBA uses its Open Market Operations (OMO) to influence the supply of money in the cash market as part of its daily liquidity management.

OMO involves the purchase and sale of existing Commonwealth Government Securities (CGS) between the RBA and the commercial banks. If the RBA needs to reduce the supply of money to maintain the cash rate at the desired level, it will sell CGS to the banks. The banks will withdraw money from their Exchange Settlement Accounts (ESA) with the RBA to pay for the CGS, thus reducing the supply of money. This would lead to a rise in the cash rate.

Also acceptable as an answer is the determination of the cash rate by the RBA using the interest rate corridor to set the cash rate. This occurs when the RBA wishes to change the stance of monetary policy. For example in July 2019 the RBA announced that it was reducing the cash rate from 1.25% to 1.00%. In order to achieve this the RBA lowered the cash rate in the interest rate corridor by changing the rate at which banks could borrow funds in the cash market. The reduction in the cash rate should encourage the banks to lower their interest rates on deposits and loans.

Question 21(c) *Outcomes assessed: P1, P2, P8, P10*

Criteria	Marks
• Demonstrates a comprehensive understanding of the likely impact of a reduction in interest rates on the Australian economy	3
• Sketches in general terms the likely impact of a reduction in interest rates on the Australian economy	2
• Demonstrates a limited understanding of the likely impact of a reduction in interest rates on the Australian economy	1

Answers could include: Since June 2019 the Reserve Bank of Australia (RBA) has reduced the cash rate from 1.5% to 1.00%. In doing so it is hoping to stimulate the Australian economy by supporting economic growth and reducing the unemployment rate. Lower interest rates should lead to increased consumption expenditure levels by households as lower interest rates on bank deposits will discourage savings and lower interest rates on loans should encourage households to borrow funds to facilitate current expenditure, especially in the retail and housing sectors.

Lower interest rates on loans should also encourage increased investment by businesses, as the cost of borrowing is cheaper. Increased investment expenditure along with increased consumption expenditure should encourage an increase in the demand for labour. This could have a two-fold effect: a decrease in the unemployment rate and an increase in wages growth leading to further increases in aggregate demand. It is possible that the increase in aggregate demand will lead to an increase in inflationary pressure pushing up the rate of inflation from the current 1.6% (June 2019) towards the RBA's inflation target range of 2% to 3% for the conduct of monetary policy.

Lower interest rates would have a negative impact on those households who depend on income derived from interest on savings such as mature age retirees. Self-funded retirees in particular would be affected. This may encourage affected households to seek alternate savings/investment options such as the purchase of shares or other investments like real estate from which they can earn higher returns than the interest received on savings deposits with banks.

It is also possible that lower interest rates relative to overseas interest rates could result in reduced capital inflow and increased capital outflow from Australia. This would result in a depreciation of the Australian dollar which has been trading at around $US0.69. A positive impact of this would be an increase in Australia's international competitiveness through lower export prices and higher import prices. This could encourage export demand and the demand for locally produced import competing products and services.

Question 21(d) *Outcomes assessed: P1, P2, P3, P8, P10*

Criteria	Marks
• Demonstrates a comprehensive understanding of the role of the Council of Financial Regulators in the Australian financial system	4
• Demonstrates a sound understanding of the role of the Council of Financial Regulators in the Australian financial system	3
• Sketches in general terms the role of the Council of Financial Regulators in the Australian financial system	2
• Demonstrates a limited understanding of the role of the Council of Financial Regulators in the Australian financial system	1

Answers could include: The Council of Financial Regulators (CFR) is the co-ordinating body for Australia's main financial regulatory agencies which are the Reserve Bank of Australia (RBA), the Australian Prudential Regulation Authority (APRA), the Australian Securities and Investments Commission (ASIC) and the Australian Treasury. The CFR meets quarterly or more often if circumstances require it such as a threat to financial stability in the Australian economy.

Each of the members of the CFR has specific areas of responsibility. The RBA conducts monetary policy to influence interest rates and the level of economic activity in the Australian economy. It is also responsible for maintaining stability in the financial system and if required, by providing emergency liquidity to financial intermediaries. It also oversees the regulation of the payments system through the Payments System Board of the RBA.

APRA has the responsibility for the supervision of all deposit taking institutions (DTIs) including banks and non-bank financial intermediaries, such as life and general insurance companies, superannuation funds and credit unions. This supervision involves liquidity management, capital adequacy standards and reporting and disclosure standards to protect depositors' funds and to maintain stability and confidence in the Australian financial system. During the Financial Services Royal Commission (the Hayne Commission) APRA was criticised for its failure to adequately supervise financial institutions.

ASIC is responsible for market integrity, consumer protection and dispute resolution across the financial system and financial products. It also enforces the Corporations Law dealing with all corporate activities. ASIC has responsibility for regulating and overseeing the operation of Australia's financial markets and the compliance by companies with the Corporations Law.

The Australian Treasury provides advice to the Australian government on the financial system including financial stability issues, the legislative and regulatory framework, policy processes, reforms, corporate practices, competition, consumer protection and foreign investment.

Overall, the role of the CFR is to contribute to the efficiency and effectiveness of financial regulation and to promote the stability of the Australian financial system. This is achieved by the members sharing information and views on financial sector conditions and risks, discussing regulatory reforms and if the need arises, by co-ordinating responses to potential threats to financial stability in Australia.

The CFR also advises the Australian Government on the adequacy of Australia's financial system regulatory arrangements and discusses the development and application of various international regulatory reforms in Australia, such as the Basel III Accords of the Bank for International Settlements (BIS). These have been implemented globally since the Global Financial Crisis (GFC) in 2008–09 to ensure large financial institutions such as banks maintain adequate low risk assets, a high level of liquidity, transparent reporting and prudent levels of capital adequacy.

Question 22(a) *Outcomes assessed: P1, P8*

Criteria	Marks
• States the correct term for the movement of the demand curve for INhouseFit multi-function home gym stations from DD to D_1D_1	1

Answers could include: The movement of the demand curve for INhouseFit from DD to D_1D_1 is termed an increase in demand or shift to the right in demand.

The change in demand from DD to D_1D_1 is called an increase in demand which is caused by factors affecting demand other than price. The increase in demand represents an increase in the intensity of demand over a range of prices. The factors leading to an increase in demand could include the following:

- A rise in income
- An increase in the population
- An increase in the popularity of a particular good or service (taste patterns)
- An increase in the price of a substitute good
- A decrease in the price of a complementary good

Question 22(b) *Outcomes assessed: P1, P11*

Criteria	Marks
• Correctly calculates the change in total revenue for INhouseFit multi-function home gym stations from DD at price $1,200 and D_1D_1 at price $1,200	1

Answers could include:
Total Revenue = Price × Change in Quantity Demanded
Total Revenue at DD = $1,200 × 400 = $480,000
Total Revenue at D_1D_1 = $1,200 × 1,000 = $1,200,000
The change in total revenue = $1,200,000 – $480,000 = $720,000
OR = $1,200 × 600 = $720,000

Question 22(c) *Outcomes assessed: P1, P3*

Criteria	Marks
• Sketches in general terms how an increase in the cost of the factors of production impact on the supply of INhouseFit multi-function home gym stations to the market	2
• Identifies how an increase in the cost of a factor of production impacts on the supply of INhouseFit multi-function home gym stations to the market	1

Answers could include: An increase in the cost of the factors of production used to produce INhouseFit multi-function home gym stations will result in an increase in the cost of production. The factors of production which may increase in price are land (rent), labour (wages), capital (interest) and entrepreneurship (profit). This will reduce the profit of the firm. If the suppliers of INhouseFit multi-function home gym stations cannot pass on the increased cost of production to consumers through a higher price, the firm may decide to decrease the number of multi-purpose home gyms being produced. This will cause the supply curve to shift to the left of the original supply curve. Hence a decrease in supply occurs. This can lead to a higher price and a lower quantity supplied to the market.

Question 22(d) *Outcomes assessed: P1, P2*

Criteria	Marks
• Provides a reason why firms which sell INhouseFit multi-function home gym stations will be interested in the price elasticity of demand for their product	2
• Makes a relevant statement about the price elasticity of demand	1

Answers could include: The price elasticity of demand measures the responsiveness of consumer demand to changes in the price of a product. Changes in consumer demand in response to price changes are not exactly the same. This is due to a range of factors which have some degree of influence over the degree of elasticity of demand.

If a small price change leads to a larger change in the quantity demanded for a product, then the product is said to be relatively price elastic. If the quantity demanded for a product is relatively unresponsive to a price change, then the product is said to be relatively price inelastic. If a percentage change in price leads to the same percentage change in the quantity being demanded by consumers, then, the term unit elasticity is used.

Firms need to know whether the good they sell is price elastic or inelastic. Firms which sell a good which is relatively elastic will face a decrease in total revenue, profit and market share when the price of the product increases. This will occur as consumers may change their preferences to a cheaper product. Firms which sell a good which is relatively inelastic will experience an increase in total revenue and profit when prices rise. This may be the case if there are no close substitutes for the good or the good may be a necessity.

The home gym equipment market is highly competitive. Firms which sell INhouseFit multi-function home gym stations would need to consider carefully any increase in the price of their products. Given there is a range of home gym equipment substitutes available on the market, consumers may be inclined to buy from competitors if firms selling INhouseFit multi-function home gym stations raised price.

Question 22(e) *Outcomes assessed: P1, P2, P3, P8*

Criteria	Marks
• Demonstrates a clear and concise understanding of how the forces of demand and supply interact in order to resolve non-equilibrium market situations and establish equilibrium in the market	4
• Demonstrates a sound understanding of how the forces of demand and supply interact in order to resolve non-equilibrium market situations and establish equilibrium in the market	3
• Sketches in general terms how the forces of demand and supply interact in order to resolve non-equilibrium market situations and establish equilibrium in the market	2
• States some relevant information about demand and supply OR non-equilibrium market situations OR market equilibrium	1

Answers could include: A market is a situation which brings together buyers and sellers of goods and services. The demand for goods and services is illustrated by a demand schedule which shows what buyers are willing and able to purchase at various price levels at a given period of time. The relationship between price and quantity is shown using a demand curve. The demand curve is a downward sloping curve. It shows the inverse relationship between price and quantity demanded.

The supply for goods and services is illustrated through a supply schedule. A supply schedule shows what sellers of goods and services are willing and able to sell at various price levels at a given period of time. The relationship between price and quantity is shown using a supply curve. The supply curve is an upward sloping curve. It shows the direct relationship between price and quantity supplied.

Market equilibrium price and quantity are established at the point of intersection of the supply and demand curves. Due to the dynamic operation of the marketplace, equilibrium price and quantity are constantly changing. A change in the determinants of demand and supply can lead to shifts in their respective curves causing a new equilibrium price and quantity to be established.

Non-equilibrium market situations occur when there is a disparity between demand and supply in the marketplace.

If the quantity supplied is greater than the quantity demanded a surplus of a good or service will arise in the marketplace. This will occur at a price above equilibrium price and quantity. In order for equilibrium to be re-established firms will reduce their prices to clear the surplus. Supply will contract towards equilibrium and demand will extend towards equilibrium. Ultimately equilibrium will be restored at a lower price and a new equilibrium quantity will be established.

Non-equilibrium market situations may also occur when there is a shortage of a good or service in the market. This will occur at a price below equilibrium price and quantity, where the quantity demanded is greater than the quantity supplied. Consumer competition will tend to force up prices as they compete for the limited supply of goods or services. Price will rise, suppliers will extend their supply and consumers will contract their demand. Equilibrium will be re-established at a higher price and a new equilibrium quantity.

Section III

Question 23 *Outcomes assessed: P1, P2, P3, P5, P8, P10*

Criteria	Marks
• Integrates relevant economic terms, concepts, relationships and theories • Provides a sustained, logical and cohesive response • Demonstrates a clear and concise understanding of how market equilibrium is determined • Clearly and comprehensively demonstrates how changes in the factors affecting demand and supply can affect market equilibrium price and quantity	**17–20**
• Applies relevant economic terms, concepts, relationships and theories • Provides a logical and cohesive response • Demonstrates an understanding of how market equilibrium is determined • Demonstrates a sound knowledge and understanding of how changes in the factors affecting demand and supply can affect market equilibrium price and quantity	**13–16**
• Uses economic terms and concepts and shows some relationships • Develops a coherent response • Sketches in general terms how market equilibrium is determined • Sketches in general terms how changes in the factors affecting demand and supply can affect market equilibrium price and quantity	**9–12**
• Uses some economic terms and concepts • Develops a generalised response • Identifies how market equilibrium is determined • States some aspects of how changes in the factors affecting demand and supply can affect market equilibrium price and quantity	**5–8**
• Uses some economic terms and concepts • Presents a limited response • May refer to market equilibrium • May list some information about demand and supply or changes in market equilibrium	**1–4**

Essay plan: A market is a situation which brings together buyers and sellers of goods and services. What buyers want is reflected in the demand for goods and services. Demand is the quantity of a good or service which consumers are willing to purchase at a particular price and at a particular period of time. What sellers are able to put onto the market is known as supply. Supply is the quantity of a particular good or service which producers are willing to offer for sale at a particular price at a particular point in time. The interaction between demand and supply in the market place results in the establishment of an equilibrium price and quantity from which there is no tendency for change. There are a number of factors which can affect the demand and the supply of a good or service. When these factors change there is a direct effect on equilibrium price and quantity.

The demand for goods and services is illustrated by a demand schedule which shows what buyers are willing and able to purchase at various price levels at a given period of time. Individual demand refers to the quantity of a good or service demanded by an individual. Market demand reflects the summation of all of the buyers of a particular good or service. The relationship between price and quantity is shown by using a demand curve. The demand curve is a downward sloping curve. It shows the inverse relationship between price and quantity. According to the law of demand, as the price of a good increases the quantity demanded of the good will fall. As the price of the good falls the quantity of the good demanded will increase.

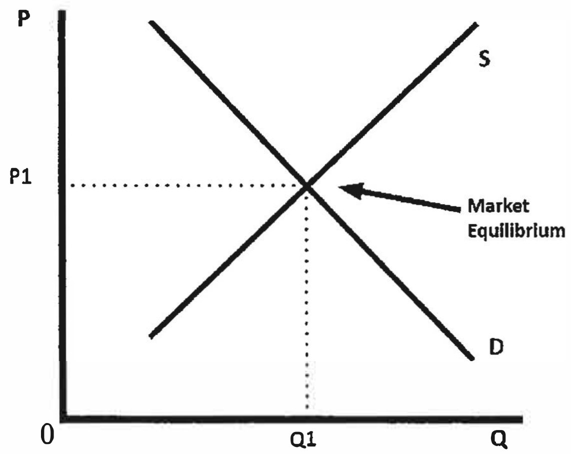
The supply of goods and services is illustrated through a supply schedule. A supply schedule shows what sellers are willing and able to sell at various price levels at a given period of time. Individual supply refers to the quantity of a good or service offered for sale by an individual firm. Market supply refers to the quantity of a good or service offered for sale by all firms.

Question 23 continues on the next page

Question 23 continued

The relationship between price and quantity supplied is shown by using a supply curve. The supply curve is an upward sloping curve. The law of supply shows the direct relationship between price and quantity supplied in the market. When the price of a good increases the quantity supplied of the good will increase. As the price of the good falls the quantity of the good supplied will fall.

Market equilibrium price and quantity are established at the point of intersection of the supply and demand curves. Equilibrium price is the price at which the amount demanded and the amount supplied are equal. The quantity which is both bought and sold at the equilibrium price is called the equilibrium quantity. The diagram below shows market equilibrium at P_1 and Q_1.



If the quantity supplied is greater than the quantity demanded a surplus (or excess) of a good or service will arise in the market place. This will occur at a price above the equilibrium price. In order for equilibrium to be re-established firms will reduce their price to clear the surplus. Supply will contract towards equilibrium and demand will extend towards equilibrium. Ultimately equilibrium will be restored at a lower price and a new equilibrium price and equilibrium quantity will be established.

Disequilibrium may also occur when there is a shortage of a good or service in the market. This will occur at a price below the equilibrium price where the quantity demanded is greater than the quantity supplied. Consumer competition will tend to force up prices. Price will rise. Suppliers will extend their supply and consumers will contract their demand. An equilibrium point will be established at a higher price and a new equilibrium price and quantity will be established.

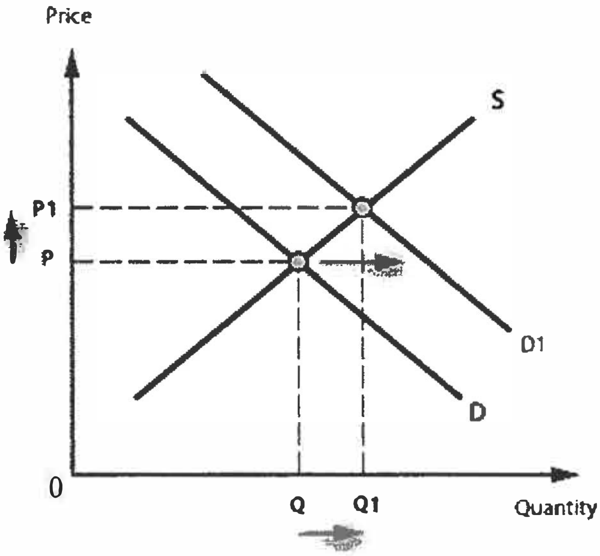
Due to the dynamic operation of markets, equilibrium price and quantity are constantly changing. Any movement of either the demand curve or the supply curve will lead to a new equilibrium price and quantity being established. A change in the determinants of demand and supply shift their respective curves causing a new equilibrium price and quantity to be established. Movements in the demand curve will lead to a new equilibrium price and quantity. This is brought about by the determinants of demand which will in turn cause an increase in demand or a decrease in demand. Factors which can affect what goods and services consumers are willing to buy include the following:

- The level of income
- The size of the population
- Consumer tastes
- The price of substitutes and complements
- Expected future prices of goods and services

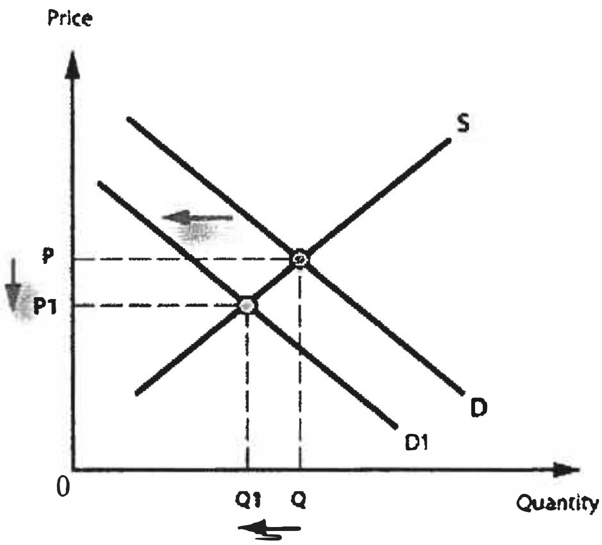
Question 23 continues on the next page

Question 23 continued

An increase in real income may lead to an increase in demand with consumers able to purchase additional goods and services as their incomes have increased. This will cause an increase in demand. The demand curve will shift to the right from D to D_1 as shown in the following diagram. An increase in demand raises the equilibrium price and the equilibrium quantity. The higher price will cause supply to extend to Q_1.



A decrease in demand can be caused by a change in consumer tastes. For example, some consumers may decide to adopt a healthier lifestyle, so they decrease their purchase of pre-packaged foods with preservatives to fresh fruit and vegetables. This causes a decrease in the demand for pre-packaged foods. The demand curve for this type of food will shift to the left from D to D_1 as shown in the following diagram. The new equilibrium of price will be lower as well as the equilibrium quantity. The lower price will cause supply to contract to Q_1.



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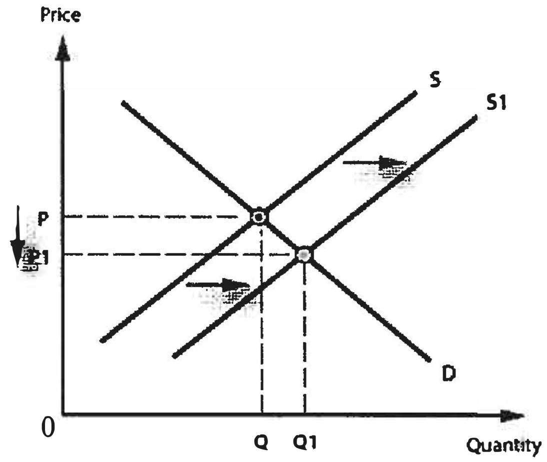
Question 23 continued

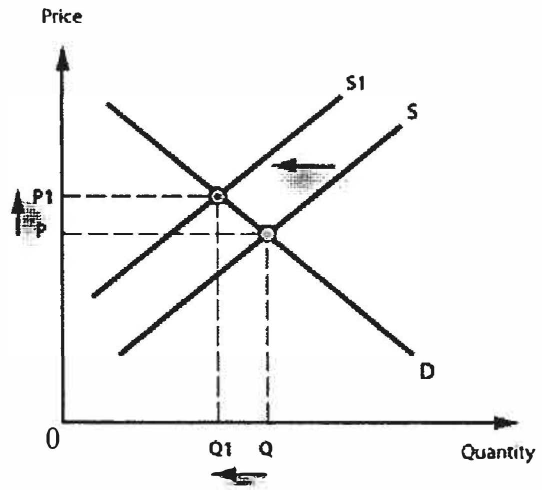
Movements in the supply curve will lead to a new equilibrium price and quantity. This is brought about by an increase in supply or a decrease in supply. Factors which influence producers in their decisions relating to the amount to supply of a good or service include:

- The price of substitutes and complements
- The price/cost of the factors of production
- Expected future prices
- The number of suppliers
- Technology

An increase in supply is a movement of the supply curve to the right of the original curve. For example, if the number of suppliers manufacturing solar panels increases in the industry, the supply curve moves to the right. The diagram below illustrates an increase in supply. Supply has moved from S to S_1 and results in a new equilibrium at a lower price (P_1) and a greater quantity (Q_1). The lower price causes demand to extend to Q_1.



A decrease in supply is a movement of the supply curve to the left of the original curve. For example, farmers may withhold some of their current livestock from going to market, anticipating a higher price for livestock in the future. The diagram below illustrates a decrease in supply. Supply has moved from S to S_1. This gives a new equilibrium at a higher price (P_1) and a lower quantity (Q_1). The higher price causes demand to contract to Q_1.



Changes in the demand and supply of goods and services play an important role in determining equilibrium price and output in the economy. These changes play a critical role in assisting economists to develop a better understanding of the dynamic nature of markets on a domestic and global scale.

Question 24 *Outcomes assessed: P1, P2, P3, P5, P6, P7, P8, P10*

Criteria	Marks
• Integrates relevant economic terms, concepts, relationships and theories • Provides a sustained, logical and cohesive response • Demonstrates a clear and comprehensive understanding of recent trends in the Australian labour market • Clearly and comprehensively demonstrates the impact of recent trends in the Australian labour market on labour market outcomes	**17–20**
• Applies relevant economic terms, concepts, relationships and theories • Provides a logical and cohesive response • Demonstrates an understanding of recent trends in the Australian labour market • Demonstrates a sound understanding of the impact of recent trends in the Australian labour market on labour market outcomes	**13–16**
• Uses economic terms and concepts and shows some relationships • Develops a coherent response • Sketches in general terms recent trends in the Australian labour market • Sketches in general terms the impact of recent trends in the Australian labour market on labour market outcomes	**9–12**
• Uses some economic terms and concepts • Develops a generalised response • Identifies some aspects of recent trends in the Australian labour market • States some aspects of the impact of recent trends in the Australian labour market on labour market outcomes	**5–8**
• Uses some economic terms and concepts • Presents a limited response • May refer to some recent trends in the Australian labour market • May refer to the impact of recent labour market trends on a labour market outcome	**1–4**

Essay plan: The Australian labour market is very dynamic because it is constantly changing in terms of types of employment, wage setting methods and the unemployment rate. Over a period of time, however, trends become evident in the labour market and the changes that occur in the labour market have an impact on labour market outcomes such as wages and employment. As the level of economic activity and the structure of the economy change the demand for labour changes. This is reflected in the level of unemployment in the economy. Unemployment refers to those members of the workforce who are currently not employed but are actively seeking employment.

In the early 2000s leading up to the Global Financial Crisis (GFC) the level and rate of unemployment steadily decreased from 6.7% in 2001–02 to 4.2% in 2007–08. The impact of the GFC led to an increase in unemployment in 2008–09. The economic stimulus provided by the Australian government limited the increase in the unemployment rate to 5.8% in 2008–09, well below other developed economies such as the USA and within the EU. The decision of many Australian businesses to reduce hours rather than retrench employees also helped to limit the increase in unemployment at the time but may have contributed to other future outcomes such as increased part time employment.

Between 2009 and 2011 unemployment decreased to 4.9% as the global economy slowly recovered from the GFC. However, the decline in Australia's international competitiveness, a result of the appreciation of the Australian dollar against our major trading partners, and the slowdown in the mining boom, led to the unemployment rate increasing to 6.1% in 2013–14. Despite the closure of some major manufacturing industries, most notably passenger motor vehicles (PMV) in 2017, the unemployment rate steadily decreased, reaching 4.9% in February 2019. It can be argued however, that much of this decrease is the result of another trend in the Australian labour market which is the increase in part time employment.

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Question 24 continued

Part time employment refers to those individuals who work more than one hour per week but less than 35 hours per week. Part time employment has been steadily increasing in Australia. In the 1970s 10% of the workforce was employed part time. Currently, that figure stands at more than 30%. In fact, since the GFC most of the increase in employment has been due to the increase in part time employment. This trend may partly explain the recent slow growth in wages.

Many part time employees are employed on a casual basis i.e. they work less than 35 hours per week, and do not have regular hours and are not entitled to sick leave and annual leave. This casualisation of the workforce is largely driven by employers as it provides them with greater flexibility and reduces labour costs. This helps to maintain the profitability of many small, medium and large businesses. For example when demand declines for firms' products or services employers may react by switching full time employees to part time work or increasing the employment of part time or casual workers at the expense of full time employees.

Some individuals may prefer part time employment because of their personal circumstances e.g. students, parents with young children and the semi-retired. Others however, may prefer to work longer hours or full time but are unable to find suitable employment or they were working full time and have had their hours reduced by their employers. The rate of underemployment where people want to work more hours has been increasing over recent years. In 2013 the underemployment rate stood at 7.5% and by February 2018 had reached 9%. By June 2019 it had fallen slightly to 8.5%. Workers most affected by underemployment are females and 15–24 year olds. In June 2019 the Labour Force Underutilisation Rate (i.e. the unemployment rate plus the underemployment rate) for 15 to 24 year olds was just under 30%.

The desire of firms to reduce labour costs has seen the rise of other trends in the labour market. There is an increasing trend in the outsourcing of tasks that would normally be performed by employees. This often involves the use of contractors, sub-contractors and labour hire firms. This enables firms to reduce their labour costs and transfer many of the employer's responsibilities to the third party. The impact of outsourcing on the labour market is magnified when the tasks are moved offshore, an increasing trend with many Australian firms. This includes large manufacturing companies which produce their goods offshore and service based companies which maintain call centres offshore or outsource some of their key business functions such as accounting and finance offshore.

The changes in the economy and especially in the labour market have impacted on the incomes derived from work, the distribution of income and non-wage outcomes. Over half of Australia's population derive their income primarily from work i.e. wages and salaries. In recent years the proportion of national income going to income derived from work has declined. In the 1990s income from work accounted for 53% of national income. By 2014 it had fallen to 49.2% and by March 2017 had fallen further to 46.2%, the lowest since the Australian Bureau of Statistics (ABS) started collecting data in 1959 and lower than in both Canada and the USA.

The distribution of income has generally become less equal over recent years. Since 2000 the lowest quintile group has remained relatively stable in its share at around 7.5%, as has the second quintile at around 12.4%. The share received by the highest quintile has increased from around 38% to over 41%. The third and fourth quintile groups, the middle income groups, have faired worse, both experiencing declines in their shares of income. The third quintile's share has decreased by almost 1% to 16.9% and the fourth quintile's share by over 2% to 22.4%.

Not only has the share of income derived from work fallen but also the distribution of that share has changed. While the national minimum wage was increased by the Fair Work Commission in 2018 by 3.5% and 3.0% in 2019, overall wage growth has only been 2.4% if full time adult average weekly earnings (AWE) are taken into account. Over the same period workers in the retail and hospitality industries have had their penalty rates reduced, decreasing their overall incomes. Meanwhile the average CEO remuneration has grown to 40 times the average weekly wage.

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Question 24 continued

The increase in part time and casual employment in recent years also highlights differences in wage outcomes. The largest groups in part time and casual employment are females and 15 to 24 year olds at 56.9% and 18% respectively. A large proportion of these jobs are in retail and hospitality which, as stated above, have also experienced a reduction in penalty rates, further reducing incomes.

Not only are females over represented in part time and casual employment but overall they receive lower incomes than males. Female dominated occupations such as health care, retail and childcare are amongst the lowest paid. While there have been significant moves towards equal pay, there has been little improvement since 2014 with the gender pay gap falling by only 0.1% to 14.8% in November 2018.

Cultural background has a varying impact on incomes. Skilled migrants, especially those from English speaking backgrounds, tend to earn higher incomes, primarily because their skills are in high demand. Those who are from non English speaking backgrounds tend to have more difficulty gaining employment and often earn lower incomes. Despite the current lower migrant intake, this trend is likely to continue.

Recent trends in the labour market have also had an impact on non-wage outcomes. If it is assumed that non-wage outcomes include holiday leave, sick leave and long service leave, casualisation and the use of subcontractors has reduced non wage outcomes to those sectors of the labour force. It can, however be assumed that those non-wage benefits have been monetised for those groups. Non-wage outcomes, however, usually refer to fringe benefits such as company cars, travel, shares and bonus payments. These benefits are more often available to middle and high income workers. Research by the Reserve Bank of Australia (RBA) suggests that fringe benefits are being used as an alternative to money wages to attract workers in those occupations where labour supply is tight and there are labour and skill shortages. This trend may partially explain the slow wages growth in Australia.

While it is believed that higher wages and fringe benefits provide incentives to workers, the increasing inequality of income distribution in Australia may be detrimental to the economy. Between 2015–16 and 2017–18 Australia's Gini co-efficient increased from 0.434 to 0.439, indicating a more inequitable distribution of income. Any increase in income for high-income households is more likely to be saved, whereas any increase in income for low-income households is more likely to be spent. Recent research has estimated that the increasing inequality in income distribution had cost the economy $247b in 2018 due to lower consumption spending by households.

With the dynamic nature of the labour market and the Australian and global economies it is likely that changes will occur that will impact on labour market outcomes. Recent cuts to income taxation by the Australian government may have a positive impact on consumer spending and economic growth. If so, the current trends in employment and wage growth may change, resulting in changes in labour market outcomes.

Question 25 *Outcomes assessed: P1, P2, P3, P5, P7, P8, P10, P11*

Criteria	Marks
• Integrates relevant economic terms, concepts, relationships and theories • Provides a sustained, logical and cohesive response • Demonstrates a clear and concise understanding of the main goals of the firm and the role of firms in solving the economic problem • Clearly and comprehensively demonstrates the importance of investment and economies of scale in a firm's production process	**17–20**
• Applies relevant economic terms, concepts, relationships and theories • Provides a logical and cohesive response • Demonstrates an understanding of the main goals of the firm and the role of firms in solving the economic problem • Demonstrates a sound understanding of the importance of investment and economies of scale in a firm's production process	**13–16**
• Uses economic terms and concepts and shows some relationships • Develops a coherent response • Sketches in general terms the main goals of the firm and the role of firms in solving the economic problem • Sketches in general terms the importance of investment and economies of scale in a firm's production process	**9–12**
• Uses some economic terms and concepts • Develops a generalised response • Sketches in general terms the goals of the firm and the economic problem • May refer to some aspects of the importance of investment and economies of scale in a firm's production process	**5–8**
• Uses some economic terms • Develops a generalised response • May refer to some goals of the firm and the role of firms in solving the economic problem • May refer to investment and economies of scale	**1–4**

Essay plan:

A business or firm is an organisation that uses resources to produce goods and services. These goods and services are usually sold to consumers to satisfy their needs and wants. In return for the provision of goods and services, consumers make payments to firms, and firms endeavour to make a profit. Normal profit is the return to the entrepreneur for risk taking in organising a business. Firms attempt to solve the economic problem of the scarcity of resources in relation to consumers' needs and wants by producing goods and services that consumers demand. They also attempt to minimise the costs of production in achieving technical efficiency.

There are various goals that a firm or business can seek to achieve. These include profit maximisation, maximising sales revenue, maximising growth and market share. The goals of the firm are usually selected by the owners and in the case of large public companies they will be determined by the board of directors. Profit maximisation is a major goal of all businesses. Maximising profits occurs when there is the greatest positive difference between the total revenue (TR) of the firm, which is gained from selling goods and services, and the total cost (TC) of employing resources to produce those goods and services. Profit is calculated as follows:

$$\text{Profit } (\pi) = \text{Total Revenue (TR)} - \text{Total Cost (TC)}$$

Total revenue is equal to the number of units of output sold by the firm multiplied by the price at which they are sold by the firm in markets:

$$\text{Total Revenue (TR)} = \text{Price} \times \text{Quantity Sold}$$

Question 25 continues on the next page

Total costs (TC) consist of fixed costs (FC) such as rent, which do not vary with output, and are paid even if the firm is not producing in the short run. Variable costs (VC) are part of total costs and include costs such as wages and raw materials which vary directly with the firm's output.

Total Cost (TC) = Fixed Costs (FC) + Variable Costs (VC)

Firms are assumed to maximise profits. If total costs equal total revenue (i.e. TC = TR) the firm will break even. If total costs exceed total revenue (i.e. TC > TR) the firm will incur a loss and may have to restructure to become more efficient and profitable or shut down. If total revenue exceeds total costs (i.e. TC < TR) the firm makes a profit. However profit maximisation will only be achieved with a level of output where there is the greatest positive difference between total revenue and total cost.

Another goal of firms may be to maximise sales or total revenue in attempting to increase market share relative to the competition. Another reason for sales maximisation might be that managers, can raise their status, salaries and bonuses within the business. Firms that try to maximise sales may produce a large output and spend large sums of money on sales and promotion such as online advertising. However a firm seeking the goal of sales maximisation may incur higher costs and reduced profitability if the goal is not achieved over time.

A further goal of the firm may be to maximise growth over time through the expansion of business activities. For example, this could be achieved by opening new stores and increasing geographical coverage by entering new markets. Firms that seek to maximise the growth in business assets hope to increase their profits in the long run. Related to a growth strategy will be a firm's goal of increasing its market share, since a greater market share may lead to increased profitability in the long run.

Firms that are incorporated businesses such as proprietary and public companies pay dividends from their profits to their shareholders. Meeting shareholders' expectations may be an important goal of companies. This goal will be met if the company maximises profits and pays dividends that provide a good return to shareholders who have invested capital in the business. Shareholders also expect capital growth through rising share prices and a rising price to earnings ratio.

Firms play a major role in a market economy in solving the economic problem of scarcity. They have to consider the following production questions and make decisions about how they are addressed:

- What goods and services to produce? This involves determining the market demand of consumers and producing goods and services to meet this demand and maximise profits.
- What quantities of goods or services to produce? The firm must produce enough goods and services to satisfy market demand and maximise profits. It must avoid surpluses and shortages of output and not waste resources.
- How to produce? The firm will use the least cost method of production to minimise costs and maximise profits. This will involve the use of the latest cost reducing technology.
- How to organise and manage production? The firm must have a sound management structure and managerial skills to organise the production process and maximise profits.

Investment in economics refers to the process of creating new capital goods to expand production. Firms will undertake investment if there is an increase in market demand for their product or service and new productive capacity is needed to meet the increase in demand. By investing in new technology, plant and equipment a firm hopes to increase its output and profits.

Question 25 continues on the next page

Question 25 continued

Closely associated with investment is the role of new technology which can lead to more efficient methods of production, distribution and marketing of goods and services. When a firm undertakes investment spending it can be separated into three components:

Gross Investment = Net Investment + Replacement Investment (Depreciation of the Capital Stock)

Gross investment is the total level of investment spending undertaken, including new or net investment which is the process of adding to the existing capital stock, and replacement investment to allow for the depreciation of the existing capital stock. By carrying out investment a firm will be looking to increase its level of technical or productive efficiency by reducing its average costs of production in the long run. These costs savings are referred to as economies of scale in production and may be either internal or external economies of scale.

Internal economies of scale are cost savings that can be realised by a firm becoming more efficient in allocating its internal resources. Students may draw a diagram of the long run average cost curve to illustrate and explain internal economies of scale. Examples of the sources of internal economies of scale could include the following:

- The increased specialisation and division of labour leading to higher labour productivity and output.
- The use of specialised capital in production which may raise total factor productivity.
- Lower input costs through the bulk purchase of raw materials and other inputs.
- Sourcing cheaper finance because a firm has a larger market share, sales and profits.
- By-products and waste materials may be recycled and lead to reduced costs.
- Research and development and new technology may lead to new products and processes.

External economies of scale result from reductions in average costs due to factors external to the firm. They may be the result of growth in the industry as a whole, causing a reduction in the long run average cost curve faced by all firms in the industry. Students may draw a diagram showing a shift in the long run average cost curve to illustrate and explain external economies of scale. External economies of scale may result from the localisation of industry or industrial agglomeration, where firms in a similar industry locate near each other to reduce costs such as the following:

- Lower resource costs because of proximity to natural resources.
- Improved transport facilities provided by government to service the needs of major industrial, mining or commercial complexes.
- Access to cheaper power and infrastructure provided by government for the whole industry.
- Proximity to a healthy, educated, trained and skilled labour force.
- Research and development (R and D) through industry and government funded R and D.
- Access to lower costs of finance due to the growth and profitability of the industry.

Firms play an important role in producing goods and services for consumers in a market economy. They are assumed to pursue the goal of profit maximisation by maximising sales revenue and minimising production costs. Firms solve the economic problem by producing goods and services that consumers demand. They undertake investment to replace depreciated capital and to increase productive capacity by acquiring new capital. In undertaking investment firms will seek to minimise their costs of production and may experience economies of scale over the long run either from internal or external sources.

Section III

Question 26 *Outcomes assessed: P1, P2, P3, P5, P8, P10*

Criteria	Marks
• Integrates relevant economic terms, concepts, relationships and theories • Provides a sustained, logical and cohesive response • Makes a decisive judgement that addresses to what extent an understanding of economics can improve an individual's wellbeing. • Clearly and comprehensively demonstrates knowledge and application of conceptual understandings using contemporary examples of 2020.	**17–20**
• Applies relevant economic terms, concepts, relationships and theories • Provides a logical and cohesive response • Makes a judgement about understanding economics • Demonstrates a sound knowledge and understanding of knowledge and application of conceptual understandings using contemporary examples of 2020.	**13–16**
• Uses economic terms and concepts and shows some relationships • Develops a coherent response • Sketches in general terms if an economic understanding improves wellbeing • Sketches in general terms some conceptual understandings using contemporary examples of 2020.	**9–12**
• Uses some economic terms and concepts • Develops a generalised response • Identifies how an economic understanding influences wellbeing • States some aspects of contemporary examples of 2020.	**5–8**
• Uses some economic terms and concepts • Presents a limited response • May refer to economic concepts and theories • May list some information about contemporary examples of 2020.	**1–4**

Essay plan: An economic understanding may include some of the basic concepts covered in the course:

- incentives can change behaviour,
- our world has finite resources,
- decisions are made at the margins,
- trade is mutually beneficial,
- transaction costs are barriers to trade,
- and profits act as a magnet for innovation and progress.

The response could also tackle some of the key inquiry questions covered in the course:

- Is our economy future-proof?
- How does the economy contribute to my wellbeing?
- Who is making decisions about my economic future?

Parts of the course must be integrated into the discussion:

- Introduction to Economics – the nature of economics and the operation of an economy
- Consumers and Business – the role of consumers and business in the economy
- Markets – the role of markets, demand, supply and competition
- Labour Markets – the workforce and role of labour in the economy
- Financial Markets – the financial market in Australia including the share market
- Government in the Economy – the role of government in the Australian economy.

Contemporary situations such as the following could be used:

- Bushfire and recovery; global trade wars; global pandemic; HSC and choices for students post-school.