

Student
number:

Student Name: _____

WRITE YOUR NAME ON THIS PAGE ONLY & STUDENT NUMBER AT THE START OF EACH QUESTION

2012

Higher School Certificate Preliminary Examination

Economics

General Instructions

- Reading time- 5 minutes
- Working time – 2 hours
- Board approved calculators may be used
- Write using black or blue pen
- Tear off the multiple choice answer sheet (at the back of this paper) for Section I

Total Marks – 80

Section I

Total marks (20)

Attempt questions 1- 20

Allow 20 minutes for this section

Section II

Total Marks (40)

Attempt all questions 21, 22, 23, 24

Allow about 1 hour for this section

Section III

Total Marks (20)

Attempt essay question 25

Allow 40 minutes for this section

This paper MUST NOT be removed from the examination room.

Student number:

SECTION I

Total Marks: 20 marks

Attempt questions 1 -20

Answer all questions on the answer sheet provided.

1) Which of the following is a benefit of higher productivity?

- (A) Higher rate of inflation
- (B) Higher rate of economic growth
- (C) Higher per unit production costs
- (D) Increase in working hours

2) The following table shows the quantity demanded at various prices for a chocolate bar.

<i>Price (\$)</i>	<i>Quantity (number of bars)</i>
3.00	500
3.50	420
4.00	360
4.50	290
5.00	200

- (A) Perfectly elastic demand
- (B) Relatively elastic demand
- (C) Relatively inelastic demand
- (D) Unit elastic demand

3) How does the Reserve Bank of Australia implement monetary policy in the Australian economy?

- (A) Setting the interest rates for all forms of borrowing in the economy
- (B) By altering its level of expenditure on welfare payments and programmes
- (C) Through changes in the official cash rate and conduct of domestic market operations
- (D) Through changes announced in its annual Budget Statement

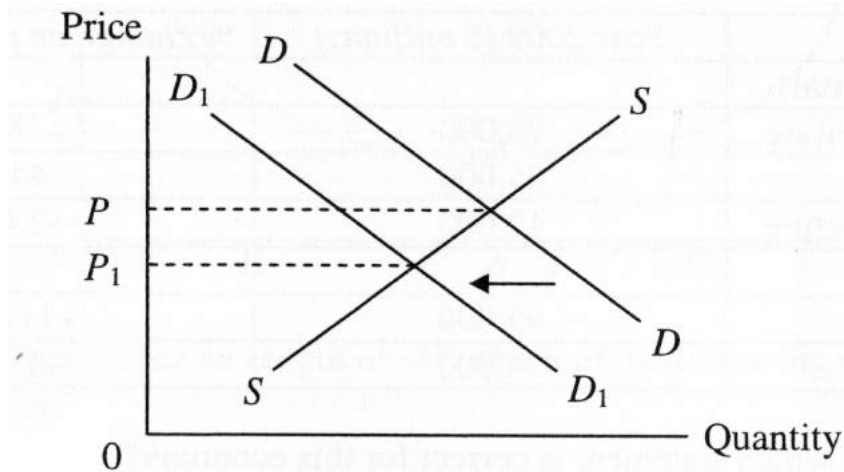
4) The following table shows tax rates over a range of taxable incomes?

<i>Taxable Incomes (\$)</i>	<i>Marginal Rate of Tax</i>
0 - \$6,000	0%
\$6,001 - \$35,000	15%
\$35,001 - \$80,000	30%
\$80,001 - \$180,000	38%
\$180,001 and over	45%

Which statement is correct of a person with a taxable income of \$50,000?

- (A) The average rate of tax is 30%
 - (B) The marginal rate of tax is 15%
 - (C) The average rate of tax is 9%
 - (D) The average rate of tax is 17.7%
- 5) If the government intervenes in the market for rice by setting a maximum price that is below the equilibrium price, which of the following is likely to occur?
- (A) A reduction in the demand for rice
 - (B) An increase in the supply of rice
 - (C) A shortage of rice available for sale
 - (D) An increase in both the supply and demand of rice
- 6) Which of the following tax types is characterised by the impact and incidence of taxation being paid by the same person or group in an economy?
- (A) Customs duty
 - (B) Excise duty
 - (C) Goods and services tax
 - (D) Income tax

7) The following diagram shows the demand and supply curves for tablet computers



Which of the following is most likely to lead to a shift in the position of the demand curve for tablet computers from DD to D_1D_1 ?

- (A) An increase in production costs
 - (B) A decrease in the price of a complementary good
 - (C) A rise in the price of a substitute good
 - (D) An increase in personal income tax rates
- 8) Which of the following institutions is responsible for the supervision of banks and superannuation funds?
- (A) The Australian Securities Exchange (ASX)
 - (B) The Australian Prudential Regulation Authority (APRA)
 - (C) The Reserve Bank of Australia (RBA)
 - (D) The Australian Securities and Investment Commission (ASIC)
- 9) Which of the following types of financial securities are issued in the primary market.
- (A) Foreign exchange
 - (B) Equity and debt securities
 - (C) Broad money and credit
 - (D) Interest rates

10) Which of the following factors is likely to cause cyclical unemployment?

- (A) Falling levels of business confidence
- (B) Rising school retention rates
- (C) A decrease in the economic growth rate of an economy
- (D) The movement of production operations offshore by local manufacturers

11) The table below shows information relating to the annual government budget for a hypothetical economy?

	<i>Year 2009 (\$ millions)</i>	<i>% change on previous year</i>
Expenditure (actual)		
Social security/welfare	70,000	-18%
Health	25,000	+4%
Essential infrastructure	12,000	+2.4%
Revenue (actual)		
Income taxes	95,000	+11.8%
Company taxes	24,000	+18%

For the year 2009 which statement is correct for this economy?

- (A) The budget is in surplus with total revenue exceeding total expenditure by \$12,000m.
- (B) The budget is in deficit with total expenditure growing faster than revenue collections.
- (C) The budget is in surplus with total expenditure exceeding total revenue by \$18,000m.
- (D) The budget is in surplus with total expenditure growing faster than revenue collections.

12) Which of the following market structures is characterised by low barriers to entry into the industry and many sellers of slightly differentiated products?

- (A) Oligopoly
- (B) Monopolistic competition
- (C) Monopoly
- (D) Perfect competition

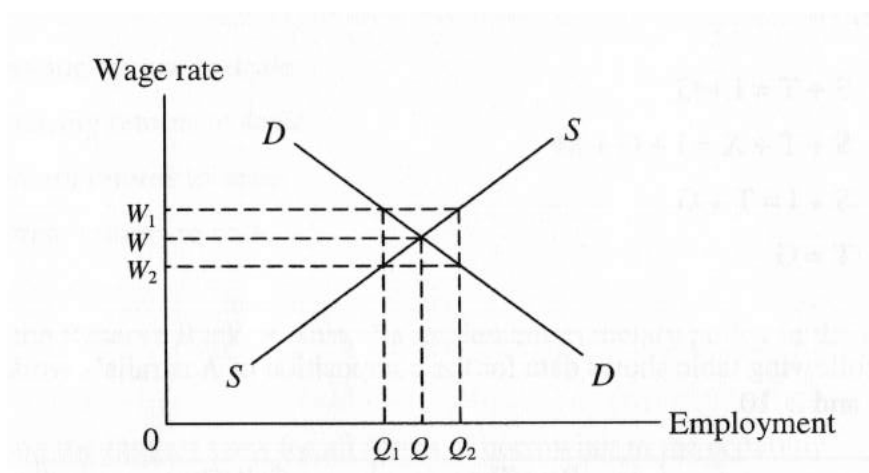
13) The following table shows data for the composition of Australia's workforce between 2009 and 2010?

Year	Part Time Employed Persons	Full Time Employed Persons	Total Unemployed Persons
2009	3,150,000	7,600,000	660,000
2010	3,300,000	7,800,000	600,000

Which of the following statements is correct?

- (A) The participation rate in 2009 was 62.5%
- (B) The unemployment rate in 2010 was 5.4%
- (C) The labour force totalled 11,410,000 persons in 2010
- (D) The unemployment rate was 5.8% in 2009

14) The following diagram shows the market for nurses.



- (A) At a wage rate of W_2 there is a shortage of nurses
- (B) At a wage rate of W_1 the demand for nurses is equal to supply
- (C) At a wage rate of W there is a surplus of nurses
- (D) At a wage rate of W_1 there is a market equilibrium

15) If the cost of labour increases relative to the cost of capital, which of the following is likely to occur?

- (A) Firms will substitute labour for capital in production
- (B) Workers will undertake more training and education
- (C) The ratio of labour to capital in production will remain unchanged
- (D) Firms will substitute capital for labour in production

16) Which of the following best illustrates why a beach is regarded as a public good?

- (A) Beaches are provided and maintained by the government
- (B) Beaches are non-rival and non-excludable in consumption
- (C) Beaches are rival and excludable in consumption
- (D) Beaches are too expensive for the private sector to provide and maintain

17) The following information is an example of a transaction in the Australian economy:

An Australian consumer purchases a new car for \$25 000. The sale price does not include the cost of future emissions of pollutants from the car.

The above example is best described as:

- (A) Economies of scale
- (B) Market failure
- (C) Price floor
- (D) Market intervention

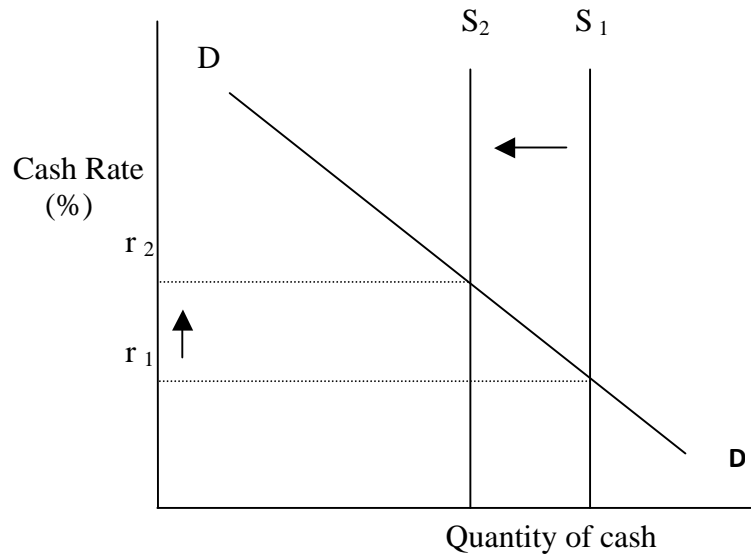
18) Which of the following government measures might lead to an increase in inequality in the distribution of income and wealth in the Australian economy?

- (A) A decrease in the marginal rate of tax for high-income earners
- (B) A cut in the Goods and Services Tax from 10% to 3%
- (C) Making it easier to receive social welfare payments
- (D) Salary caps or an upper limit on the salaries of company executives

19) Which of the following is characteristic of a country adopting a decentralised wage-fixing system?

- (A) The Government at all levels has less influence over wage determination
- (B) The wage fixing system is less flexible
- (C) Unions and industrial tribunals have a large role in the wage determination process
- (D) Wage growth is linked primarily to changes in the Consumer Price Index (CPI)

20) The following diagram shows the demand and supply of cash in the short term money market.



What is the impact, other things being equal, of the above change in the cash rate?

- (A) There would be decreased economic activity, increased inflationary pressure and lower interest repayments for those with household debt
- (B) There would be increased economic activity, decreased inflationary pressure and higher interest repayments of those with existing loans
- (C) There would be increased economic activity, increased inflationary pressure and higher interest repayments for those with household debt
- (D) There would be decreased economic activity, decreased inflationary pressure and higher interest repayments for those with household debt

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SECTION II

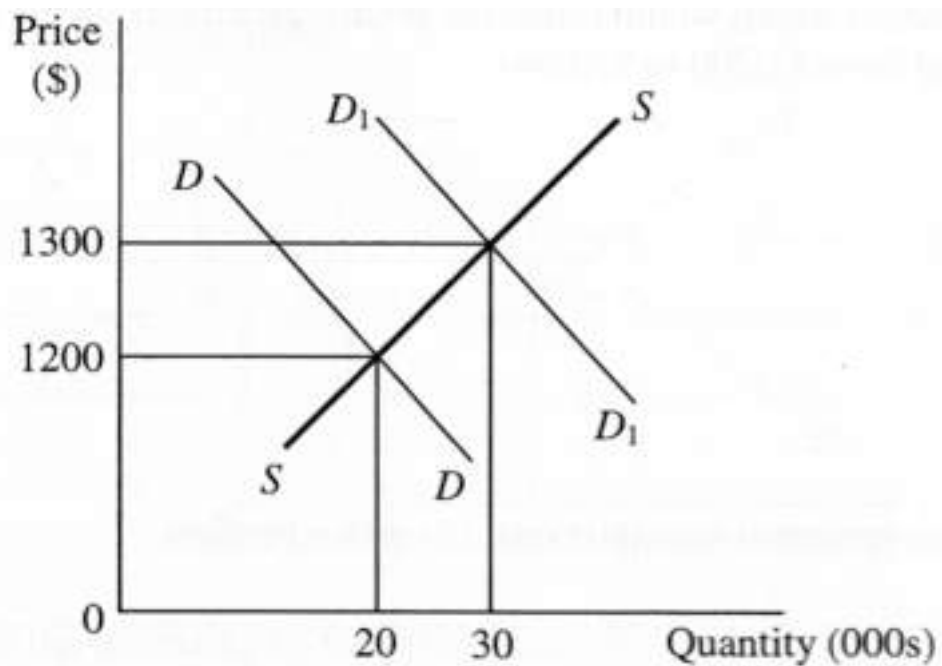
Total Marks: 40 marks

Attempt Questions 21 -24

Answer all questions in the space provided

Question 21 (10 marks)

The following diagram shows the demand and supply of solar panels (for use in production of electricity).



(a) Define *market equilibrium* (1 mark)

(b) Identify the initial equilibrium quantity of output (1 mark)

(c) Outline TWO factors which would cause the demand for solar panels to change from DD to D_1D_1 (2 marks).

(d) Describe TWO factors which would affect the price elasticity of supply of solar panels if the price increased from \$1,200 to \$1,800 (2 marks).

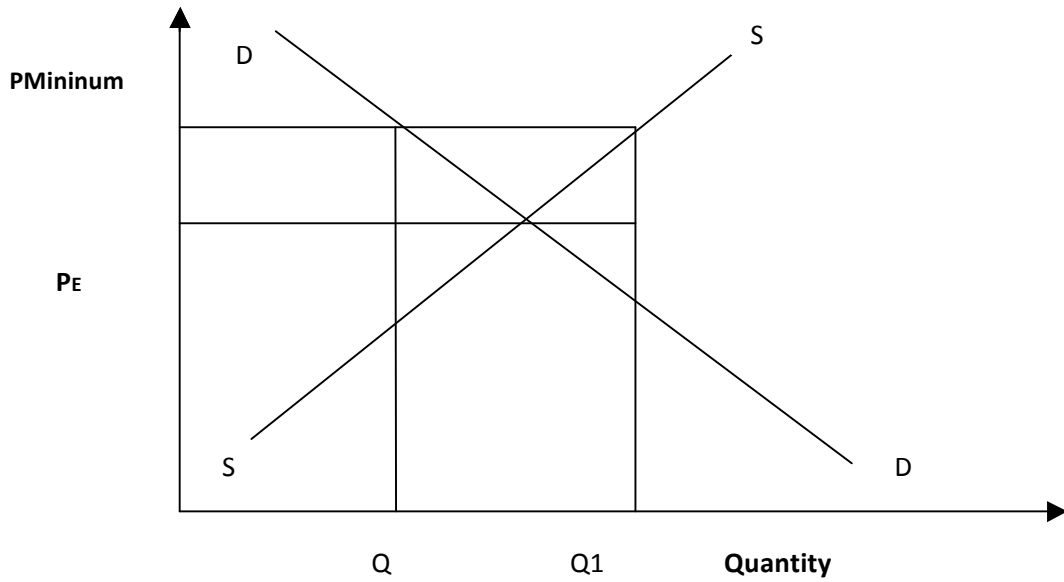
(c) Outline TWO features of the Reserve Bank's conduct of monetary policy (2 marks).

(d) Explain TWO effects of an increase in the cash rate on the Australian economy (4 marks).

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Question 23 (10 marks)

The following diagram illustrates a 'price floor' for a hypothetical market in Australia.



(a) Define the term *price floor*. (1 mark).

(b) Describe a situation in which the Federal Government might impose a price floor. (2 marks).

Question 24 (10 marks)

Study the following table then answer the questions below.

The labour force statistics are for a hypothetical economy.

Total population	940 000
Employed persons	515 000
Working age population	700 000
Unemployed persons	70 000

(a) Calculate the unemployment rate for this economy (1 mark)

(b) Calculate the labour force participation rate (1 mark)

(c) Distinguish between unemployment and underemployment (2 marks)

(d) Explain ONE factor influencing the labour force participation rate (2 marks)

(e) Explain ONE argument for and ONE against government intervention to achieve a more equitable distribution of income from work (4 marks)

End of Question 24

SECTION III

Total Marks : 20 marks

Attempt Question 25

Answer the question on the writing paper provided.

In your answer you will be assessed on how well you:

- **Demonstrate knowledge and understanding relevant to the question**
 - **Apply relevant economic terms, concepts, relationships and theory**
 - **Present a sustained, logical and cohesive response**
-

Question 25 (20 marks)

Outline the negative economic consequences of large fluctuations in economic growth. Explain how fiscal and monetary policy can be used to stabilise economic activity.

End of Exam

Student
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SYDNEY TECHNICAL HIGH SCHOOL

ECONOMICS – ANSWER SHEET

SECTION I

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

16. A B C D

17. A B C D

18. A B C D

19. A B C D

20. A B C D

Questions 1-20 (20 marks)

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

Question 21(a)

Criteria	Marks
• Correctly defines the meaning of <i>market equilibrium</i>	1
• Incorrect calculation	0

Suggested answer:

Market equilibrium is a situation where the market demand curve and the market supply curve intersect in order to determine equilibrium price and equilibrium quantity.

Question 21(b)

Criteria	Marks
• Correctly calculates output of 20,000 at the original point of market equilibrium	1
• Incorrect calculation	0

Question 21(c)

Criteria	Marks
• Sketches in general terms TWO factors which would cause the demand for solar panels to change from DD to D_1D_1 (an increase in demand)	1
• Incorrect calculation	0

Suggested answer:

The change from DD to D_1D_1 is called an increase in demand which is caused by factors affecting demand other than price. Two of the following factors that could increase demand for this product, should be explained:

- A rise in consumer income (or reduction in personal income taxes)
- An increase in population
- An increase in the popularity of a particular good or service (taste patterns), e.g. for environmentally friendly products
- An increase in the price of a substitute good, including due to carbon tax (e.g. coal fired electricity generation)
- A decrease in the price of complementary goods (such as power meters, power inverter)
- An improvement in technology leading to better quality solar panels

Question 21(d)

Criteria	Marks
• Provides characteristics and features of TWO factors which would affect the price elasticity of supply	2
• Provides characteristics and features of ONE factor which would affect the price elasticity of supply OR identifies TWO factors	1

Suggested answer:

- The level of stocks which are held by the firm can affect the price elasticity of supply. If firms have inventories they can respond to changes in price by adjusting their supply.
- If a firm has excess capacity it can expand its level of production in order to respond to a change in price by increasing production and supply.
- The period of time it takes for a firm to change its factor inputs in response to a change in price can affect the elasticity of supply. Students may refer to the market period (no factors of production can be changed or varied), the short run (some factors of production can be changed or varied) and the long run (all factors of production can be changed or varied).

Question 21(e)

Criteria	Marks
• Inquires into the reasons why the government may intervene in certain markets	3-4
• Identifies some general reasons why the government may intervene in certain markets	1-2

Suggested answer: There are certain situations where market failure occurs and the government may intervene in the market and provide an alternative solution.

- The government may intervene in the market by setting a maximum price (price ceiling) or by setting a minimum price (price floor).
- The government may also intervene in the market to provide public goods, for example, the armed forces to protect a country or flood mitigation schemes to protect farmers from damaging floods.
- Merit goods are also provided by the government including libraries, public schools, art galleries and parks and playground facilities.
- A negative externality is another example of market failure. A negative externality arises when the price of a good doesn't include the social costs of the good. Pollution is an example of a negative externality. The government may intervene and impose a tax on the polluter in order to finance the social costs borne by the community because of the pollution caused by private production of polluting goods.

Question 22(a)

Criteria	Marks
• Notes the differences between credit and share markets	1
• Describes either credit or share markets but does not distinguish between them	0

Suggested answer:

Credit markets are where loans and other debt instruments are issued and traded between investors **whereas** the share market is where equity instruments (shares) are issued by companies and traded between investors.

Question 22(b)

Criteria	Marks
• Correctly explains why and how the Reserve Bank of Australia regulates Australia's financial markets	2
• Describes a feature of the Reserve Bank's regulation of Australia's financial markets	1

Suggested answer: The Reserve Bank of Australia has a major role in maintaining financial system stability and promoting the efficiency of the payments system. The Reserve Bank pursues two broad sets of policies: those designed to prevent financial disturbances and those that counteract the effects of disturbances if they occur. In 1998 the responsibility for the supervision of banks was transferred from the RBA to the Australian Prudential Regulation Authority (APRA). The Reserve Bank operates the Payments System Board to ensure the payments system functions efficiently and also conducts a Financial Stability Review to ensure financial stability in the Australian financial system. In exceptional circumstances it can provide lender of last resort facilities to a major financial institution.

Question 22(c)

Criteria	Marks
• Indicates TWO features of the Reserve Bank's conduct of monetary policy	2
• Indicates only ONE feature of the Reserve Bank's conduct of monetary policy	1

Suggested answer: Two of the following features of the conduct of monetary policy should be addressed:

- Monetary policy aims to control consumer price inflation and encourage strong and sustainable growth of the economy. The Reserve Bank's operational target is to achieve 2% to 3% CPI inflation on average over the economic cycle.
- Monetary policy decisions are made by the RBA and involve setting the interest rate on overnight loans in the money market which is known as the cash rate.
- The RBA uses its domestic market operations to influence the cash rate. The cash rate is determined in the money market as a result of the interaction of demand and supply of overnight funds.
- The RBA's ability to target the cash rate stems from its control over the supply of funds which the banks use to settle transactions among themselves. These are called exchange settlement funds and are held with the Reserve Bank.
- Movements in the cash rate are passed through quite quickly to the whole term structure of deposit and lending rates which ultimately affects spending and output.

Question 22(d)

Criteria	Marks
• Correctly explains TWO effects of an increase in the cash rate on the Australian economy by relating cause and effect	4
• Describes rather than explains TWO effects of an increase in the cash rate on the Australian economy by relating cause and effect	3
• Correctly explains ONE effect of an increase in the cash rate on the Australian economy by relating cause and effect	2
• Describes rather than explains ONE effect of an increase in the cash rate on the Australian economy	1

Suggested answer: Changes in interest rates can affect Australian economic activity through a number of mechanisms. They can affect savings and investment behaviour, the spending behaviour of households, the supply of credit, asset prices and the exchange rate, all of which affect the level of aggregate demand.

An increase in the cash rate would be implemented by the Reserve Bank of Australia to reduce the growth in aggregate demand in order to contain inflation and rising inflationary expectations in the Australian economy.

Two of the following effects of an increase in interest rates on the Australian economy should be explained:

- Lower levels of spending on consumer and investment goods as cash flows are reduced for households and firms through higher interest payments on existing levels of debt
- A disincentive to borrow funds because of higher interest costs and a greater incentive to save and reduce existing debt on the part of consumers and firms
- An increased cost of credit borrowings and purchases on the part of individuals, firms and governments. This will reduce spending and the growth of aggregate demand
- Higher levels of capital inflow and increased demand for Australian dollars which could lead to an appreciation of the exchange rate. This would have a dampening effect on economic growth through lower competitiveness and export earnings
- The reduction of inflationary expectations in the economy on the part of businesses leading to a moderation in the level of price adjustments, helping to contain price inflation
- The reduction of inflationary expectations in the economy on the part of workers leading to a moderation in the level of wage demands, helping to contain wage inflation
- Lower levels of overall spending in the economy leading to reduced levels of output and economic growth. This will eventually result in lower inflation and inflationary expectations through slower and more sustainable growth in aggregate demand

Question 23(a)

Criteria	Marks
• Accurately defines the term 'price floor'	1
• Incorrect definition	0

Suggested answer could include the following definition: A price floor is a minimum price set by the government for which a good, service or factor of production can be sold, usually resulting in market disequilibrium as market supply will be greater than market demand.

Question 23(b)

Criteria	Marks
• Clearly describes a situation in which the Federal Government would impose a price floor	2
• Limited description	1
• Inaccurate description	0

Suggested answer could include a description of the following situations: Low market prices for agricultural commodities may persuade the Government to intervene in order to provide a minimum income stream for farmers. e.g. Wool Industry in 1980s.

Question 23(c)

Criteria	Marks
• Clear explanation and accurate justification of the importance of competition is important for the efficiency of markets	3
• Good explanation and justification for the importance of competition	2
• Limited explanation and/or justification of the importance of competition	1
• Inaccurate or inappropriate explanation and/or justification	0

Suggested answer could include lack of competition allows companies to produce less goods than would be in a competitive market in order to charge higher prices (in order to maximize profits). Competition in markets achieves efficiency as follows:

- Producers minimize their costs of production, use cost-effective production methods and minimize waste (technical efficiency) of they go out of business
- Competition ensures that producers are responsive to consumer demand (dynamic efficiency) and resources are allocated to their most valued use (allocative efficiency)

Question 23(d)

Criteria	Marks
• Correctly identifies and provides the key features of TWO methods of government intervention to encourage competition	4
• Correctly identifies and provides the key features of ONE methods and identifies another	3
• Identifies TWO methods of government intervention to encourage competition	2
• Identifies ONE method or provides a generalized response	1

Suggested answer could include privatisation/corporatisation of government monopolies, deregulation of industries to allow competition, ACCC enforcement of the Competition and Consumer Act, blocking takeovers, prohibiting new monopolies and anti-competitive or cartel behaviour, forced sharing of infrastructure (e.g. Telstra copper wires, NBN, railways to mines), separation of businesses (e.g. Telstra), fines, inquiries into pricing (e.g. groceries, petrol).

Question 24(a)

Criteria	Marks
• Accurately calculates the unemployment rate as 11.97%	1
• Incorrect calculation	0

Suggested answer: $\text{unemployed} / (\text{employed} + \text{unemployed}) \times 100 = 70,000 / (515,000 + 70,000) \times 100$

Question 24(b)

Criteria	Marks
• Accurately calculates the participation rate as 83.57%	1
• Incorrect calculation	0

Suggested answer: $[(\text{employed} + \text{unemployed}) / \text{working age population}] \times 100 = [(515,000 + 70,000) / 700,000] \times 100$

Question 24(c)

Criteria	Marks
• Notes the differences between unemployment and underemployment	2
• Describes either unemployment or underemployment but does not distinguish between them	1

Suggested answer: unemployment is the condition of someone actively seeking employment but being unable to find a job whereas underemployment is the condition of someone not working full-time (therefore not unemployed) but would like more hours of work.

Question 24(d)

Criteria	Marks
• Correctly relates the cause and effect of one factor influencing labour participation	2
• Correctly identifies on factor influencing labour participation or provides a generalized response	1

Suggested answer could include pay levels, working conditions, education/skill/accreditation requirements, occupational mobility, geographic mobility, state of the economy, retirement age, social attitudes, school retention rates, unemployment benefits, work for the dole, government jobsearch/retraining programs.

Question 24(e)

Criteria	Marks
• Correctly identifies and relates the cause and effect of ONE benefit and ONE detriment of more equitable distribution of income	4
• Correctly identifies and relates the cause and effect of ONE benefit/or detriment of more equitable distribution of income and identifies another	3
• Correctly identifies ONE benefit and ONE detriment	2
• Presents a generalised response pertaining to benefits/detriments	1

Suggested answer could include benefits (provides incentive to work, incentive to innovate, encourages mobility of labour) and costs (social cohesion, intergenerational poverty, constrains growth (APC), strain on government budget)

Question 25 (20 marks)

Outline the negative economic consequences of large fluctuations in economic growth. Explain how fiscal and monetary policy can be used to stabilise economic activity.

Criteria	Marks
<ul style="list-style-type: none"> • Presents a sustained, logical and well structured and cohesive answer • Integrates extensive and relevant economic terms, data, issues, concepts, relationships and theories • Sketches in general terms, the negative consequences of booms and recessions in economic growth • Demonstrates clear and concise understanding of how macroeconomic policy can be used to stabilise economic activity 	17-20
<ul style="list-style-type: none"> • Develops a logical and coherent answer • Consistently uses relevant economic terms, data, issues, concepts, relationships and theories • Identifies the negative consequences of booms and recessions in economic growth • Demonstrates an understanding of how macroeconomic policy can be used to stabilise economic activity 	13-16
<ul style="list-style-type: none"> • Develops a coherent answer • Uses relevant economic terms, concepts and relationships • Identifies some negative consequences of booms and/or recessions • Sketches in general terms how macroeconomic can be used to stabilise economic activity 	9-12
<ul style="list-style-type: none"> • Develops a generalised response • Uses some economic terms, concepts and relationships • States some negative consequences of fluctuations in economic activity and some aspects of fiscal and/or monetary policy 	5-8
<ul style="list-style-type: none"> • Uses some economic terms and/or concepts • Presents a limited response • Lists some aspects of economic growth and fiscal and/or monetary policies 	1-4

Answers may include

Economic instability

- Business cycle
- GDP
- Boom
- Inflation
- Recession
- Unemployment
- Derived demand for labour
- Wages, incomes
- Aggregate demand (AD)
- Circular flow of income

Fiscal and monetary policy

- Macroeconomic policy
- Countercyclical
- Contractionary
- Expansionary
- Fiscal policy
- Budget, surplus, deficit
- Automatic stabilisers
- Spending (G)
- Taxation (T)
- Monetary policy
- RBA
- Saving (S)
- Investment (I)
- Inflation target
- Cash rate
- Interest rates
- Money supply
- Transmission mechanism