

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS Cambridge International Level 3 Pre-U Certificate Principal Subject

ECONOMICS

Paper 1 Multiple Choice, Short Answers and Data Response

9772/01 May/June 2012 2 hours 15 minutes

Additional Materials: Answer Booklet/Paper

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet. Write your Centre number, candidate number and name on all the work you hand in. Write in dark blue or black pen.

For Section A Multiple Choice mark your choice of answer clearly on your Multiple Choice Insert. Write your Centre number, candidate number and name on the Insert.

You may use a soft pencil for any diagrams, graphs or rough working. Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions. You may use a calculator.

You are advised to spend 50 minutes on Section A, 35 minutes on Section B, and 50 minutes on Section C.

At the end of the examination, fasten all your work securely together ensuring that you also attach your answers for Section A which are on the Multiple Choice Insert. The number of marks is given in brackets [] at the end of each question or part question.

This document consists of 21 printed pages, 3 blank pages and 1 Insert.



UNIVERSITY of CAMBRIDGE International Examinations

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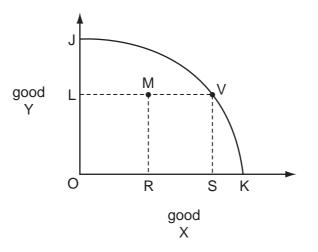
Section A

There are **thirty** questions in this Section. Answer **all** questions. For each question there are four possible answers, **A**, **B**, **C** and **D**.

Choose the **one** you consider correct and record your choice of answer clearly **on the Multiple Choice Insert**.

Each correct answer will score one mark. A mark will not be deducted for a wrong answer.

1 In the diagram, JK is the production possibility curve (PPC) of a country that produces two goods, X and Y.



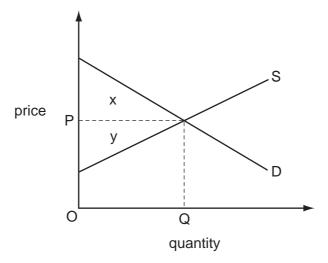
The economy initially produces the combination of goods X and Y indicated by point M.

It then moves to point V.

What is the opportunity cost to the economy of producing the additional quantity, RS, of good X?

- A quantity SK of good X
- B quantity OL of good Y
- C quantity OJ of good Y
- D zero

- 2 In a centrally planned economy, what would be most likely to explain the failure of particular industries to achieve their output targets?
 - **A** a change in consumer tastes
 - **B** a deficiency in aggregate effective demand
 - **C** an increase in the household saving ratio
 - D miscalculation of the interdependence between industries
- 3 The diagram shows the demand for and the supply of a good.

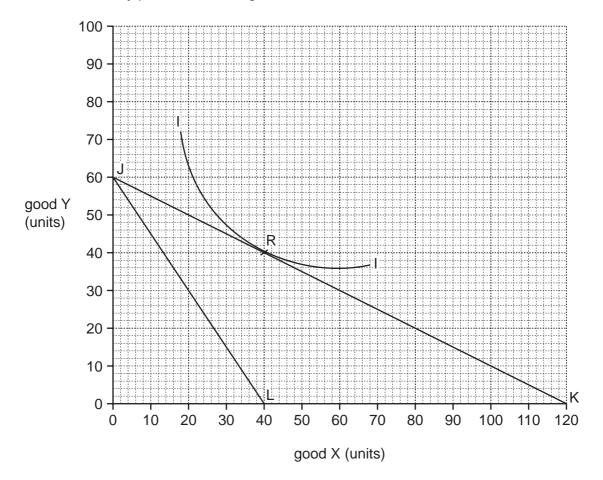


Which area measures the difference between the total amount consumers would be willing to pay for the equilibrium level of output and the minimum amount that producers require to produce that level of output?

Α	х	Ву	C x + y	D x – y
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4 In the diagram, I is an indifference curve and JK is the initial budget line of an individual who spends the whole of his income on just two goods, X and Y.

Initially the price of Y is £20, the price of X is £10, and the individual chooses the combination of X and Y indicated by point R in the diagram.

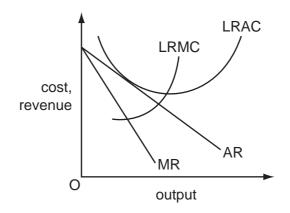


An increase in the price of good X from \pounds 10 to \pounds 30 causes the individual's budget line to shift to JL.

What increase in his money income would be just sufficient to compensate him for this price increase?

A £300 **B** £600 **C** £900 **D** £1200

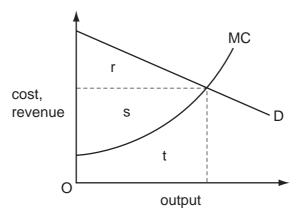
5 The diagram shows the cost and revenue curves of a monopolistically competitive firm in long-run equilibrium.



Which statements correctly describe the performance of this firm?

	The firm is making normal profits.	The firm is fully exploiting all economies of scale.	
Α	no	no	
В	no	yes	
С	yes	no	
D	yes	yes	

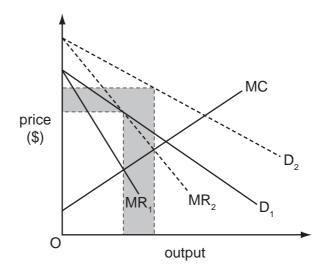
6 The diagram shows the cost and revenue curves of a profit maximising monopolist that has zero fixed costs and is able to implement perfect price discrimination.



Which area measures the monopolist's profits?

Ar+s-t Br+s Cr Ds

7 An advertising agency estimates than an advertising campaign would shift the demand curve for a profit maximising firm's product from D_1 to D_2 in the diagram.



What does the shaded area measure?

- A the additional sales revenue the campaign would be expected to generate
- **B** the maximum sum it would be worth the firm spending on the campaign
- **C** the opportunity cost to the agency of undertaking the campaign
- **D** the opportunity cost to the firm of taking up the campaign
- 8 An industry consists of two firms, X and Y.

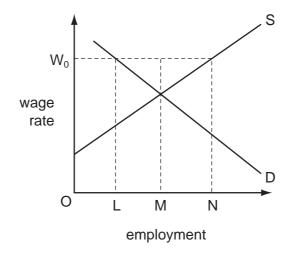
The Profit-Payoff Matrix shows how the profits of X and Y vary depending on the prices charged by the two firms.

		price charged by X	
		P _X = £10	P _X = £5
	P _Y = £10	£6m _x	£10m _X
price charged by Y		£6m _Y	-£3m _Y
	P _Y = £5	-£3m _x	£0 _x
		£10m _Y	£0 _Y

By how much would the two firms be able to increase their joint profits if they were to collude rather than act competitively?

- A £0m
- **B** £5m
- C £7m
- **D** £12m

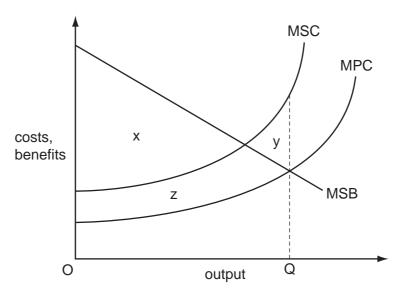
9 The diagram shows an industry's demand for and supply of labour.



Initially the labour market is in equilibrium. The workers then form a trade union which negotiates a wage equal to OW_0 with the employers.

What will be the effect on the level of employment in the industry?

- A an increase equal to MN
- B an increase equal to LM
- C a decrease equal to LN
- D a decrease equal to LM
- **10** The diagram shows the marginal private cost (MPC) and marginal social cost (MSC) curves of a good, and its marginal social benefit (MSB).



Which area measures the net social benefit if output OQ is produced?

A x **B** x-y **C** x+y **D** x-z-y

- **11** Which policy change will make some economic agents better off without making anyone worse off?
 - A allowing firms to buy and sell existing pollution permits
 - B introducing a national minimum wage
 - **C** introducing free bus travel for those over 60
 - **D** removing restrictions on the opening hours of supermarkets
- **12** In which situation will it be necessary to use an alternative to the price mechanism to allocate a good between consumers?
 - **A** Consumers have imperfect knowledge.
 - **B** The government sets a price ceiling below the equilibrium price.
 - **C** There is a single monopoly producer.
 - **D** Supply exceeds the quantity demanded at the initial market price.
- **13** A Government's health department announces that it intends to make greater use of market forces in providing government health care.

Which change would not be consistent with this announcement?

- A allowing patients to choose the hospital at which they wish to be treated
- **B** paying hospitals according to the number of patients they treat
- **C** publishing league tables showing the quality of care provided by different hospitals
- **D** setting a maximum limit for the time patients must wait for an operation
- **14** A government gives its approval for the building of a private airport because the airport would be socially beneficial.

In making its decision it calculates private costs at \$700 m, private benefits at \$800 m and external costs at \$200 m.

What does this suggest must be true about the external benefits of the scheme?

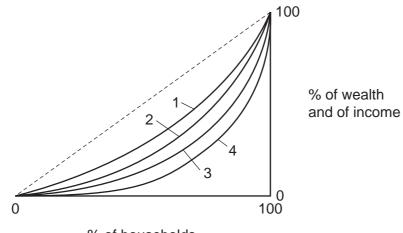
- A External benefits equal private benefits.
- B External benefits exceed \$100 m.
- **C** External benefits exceed external costs.
- **D** There are no external benefits.

- **15** Why might published figures for national income per head of population at constant prices **understate** the improvement in a country's average standard of living over a period of time?
 - **A** The economy experienced inflation.
 - **B** The population increased.
 - **C** There was a decline in the average hours worked.
 - **D** There was an increase in pollution.
- **16** A rise in the rate of Value Added Tax increases a country's Consumer Price Index (CPI) and its annual rate of inflation.

In the absence of any further changes which combination is correct?

	increase in CPI	increase in inflation rate
Α	permanent	permanent
в	permanent	temporary
С	temporary	permanent
D	temporary	temporary

17 The Lorenz curves in the diagram show different distributions of income and wealth.



% of households

Wealth in a country is more unequally distributed than income.

The country's government adopts policy measures which reduce wealth inequalities but at the same time increase income inequalities.

Which combination could show the effects of these policy measures on the distribution of income and wealth within the country?

	distribution of wealth	distribution of income	
Α	shift from curve 4 to curve 3	shift from curve 1 to curve 2	
в	shift from curve 3 to curve 4	shift from curve 2 to curve 1	
С	shift from curve 2 to curve 1	shift from curve 3 to curve 4	
D	shift from curve 1 to curve 2	shift from curve 4 to curve 3	

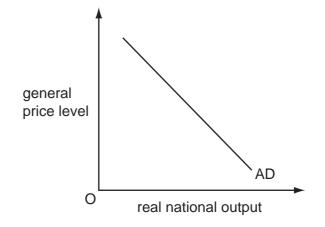
18 The table shows changes between 2009 and 2010 in some key economic variables for country X and the world economy.

	country X %	world %
increase in index of hourly earnings	3.5	4.5
increase in labour productivity	2.5	5.5

What would explain why the country's relative unit labour costs fell by 2.0 % between 2009 and 2010?

- **A** There was about a 4% increase in the country's GDP Deflator.
- **B** There was about a 4% decrease in the country's GDP Deflator.
- **C** The trade weighted value of the country's currency appreciated by about 4%.
- **D** The trade weighted value of the country's currency depreciated by about 4 %.

19 The diagram shows a country's aggregate demand curve.



What could explain why the curve slopes downwards?

- **A** A fall in the general price level increases the real value of money.
- **B** A fall in the general price level leads to an increase in interest rates.
- **C** A fall in the general price level leads to a rise in the real exchange rate.
- **D** A fall in the general price level leads to the expectation of a further decrease in the general price level.
- **20** In a closed economy with no government, C = 30 + 0.7Y, where C is consumption and Y is income.

The equilibrium level of income is 300.

What is the level of saving?

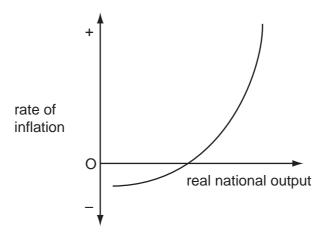
- **A** 60 **B** 100 **C** 210 **D** 270
- **21** A country experiences an increase in productivity as measured by output per labour hour.

At the same time, output per worker decreases.

What could explain this?

- A an increase in capital investment
- **B** an increase in hourly wage rates
- C an increase in part-time employment
- D an increase in unemployment

- **22** In which situation is it most likely that an increase in government spending will crowd out private investment?
 - **A** when the economy is growing very slowly
 - B when unemployment is very low
 - **C** when there is a large gap between actual and potential output
 - **D** when the household saving ratio is at a high level
- **23** The diagram shows the short-run trade-off between a country's inflation rate and its real national output level.



What could cause the curve to shift to the left?

- **A** a decrease in the money supply
- **B** a decrease in the current rate of inflation
- **C** an increase in labour productivity
- **D** an increase in the expected future rate of inflation

24 The statistics in the table below relate to an economy's labour market.

number of persons of working age in employment	37.6 million
number of persons of working age not working but who are actively seeking employment	2.4 million
number of persons of working age not working who are not looking for a job	4 million

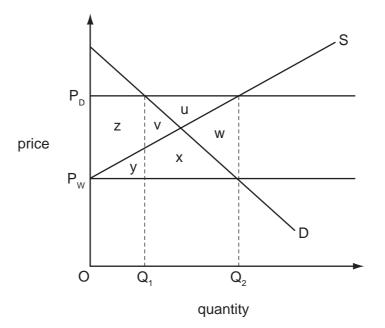
What is the economy's unemployment rate (% figures rounded to the nearest decimal point)?

- **A** 6.0%
- **B** 6.4%
- **C** 10.0%
- **D** 14.5%
- 25 A surge in world commodity prices results in an increase in inflation for a small economy.

How would an increase in this country's interest rates be most likely to reduce the impact of the higher commodity prices on the economy's inflation rate in the short run?

- A by creating incentives for domestic producers to find cheaper substitutes
- **B** by reducing the demand for commodities
- **C** by raising the exchange rate
- **D** by increasing the cost of borrowing

26 In the diagram, D is the domestic demand curve of an agricultural commodity. P_w is the world price and S is the supply curve of domestic producers.

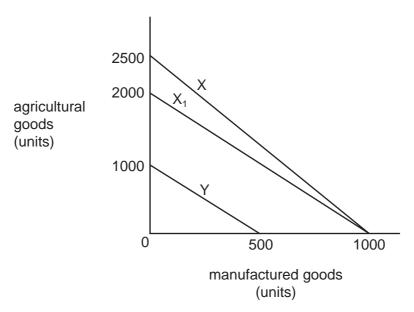


The country's government imposes a tariff equal to P_WP_D on imports, and then sustains the domestic price at P_D by purchasing the excess quantity supplied and disposing of it in export markets at the world price.

What is the cost of these arrangements to the government?

- A areas z+y
- **B** areas u+v+x+w
- **C** areas z+y+u+v+x+w
- **D** areas u+v+w+x minus areas z+y

27 The diagram represents the production possibilities of two economies X and Y.



As a result of soil erosion in economy X, the production possibility curve shifts from X to X₁.

According to the law of comparative advantage, what should country Y do now?

- A cease to trade with country X
- B export agricultural products to country X
- **C** export manufactured products to country X
- **D** import both agricultural and manufactured products from country X
- **28** Country X joins an existing customs union comprising countries Y and Z.

Country W remains outside the customs union.

Both X's initial tariff and W's tariff are at the same level as the customs union's common external tariff.

What is most likely to be the effect on trade when X joins the customs union?

trade between X and Y		trade between Z and W	
Α	increase	decrease	
в	increase	increase	
С	unchanged	decrease	
D	unchanged	unchanged	

- 29 What is not included in the calculation of a country's Human Development Index?
 - A education
 - **B** income per head
 - **C** life expectancy
 - **D** population growth
- **30** What is most likely to increase the long-run trend rate of growth and to reduce the inflation rate of developed economies?
 - A the imposition of import tariffs on manufactured goods from developing economies
 - **B** the introduction of import quotas on manufactured goods from developing economies
 - **C** increased inward migration from developing economies
 - D increased humanitarian aid to developing economies

[Total: 30]

17

Section B

Answer all questions.

Question 1

- (a) With the use of an example, explain what is meant by the term 'the marginal propensity to consume' (mpc). [2]
- (b) If, in a closed economy, the mpc = 0.8, what is the value of the national income multiplier (k)?

[1]

(c) If government spending on goods and services rises by £20bn whilst taxes increase by £4bn, with this given value of k, what will be the final change in National Income for the economy?

[2]

[1]

Question 2

(b) Explain why this is so.

- (a) Assuming no externalities, which of the following will ensure that allocative efficiency is achieved?
 - MC = MR . MC = Price MR = Price
 - [2]
- (c) Explain how allocative efficiency would be affected by the presence of negative externalities. [2]

Question 3

	Proportionate change in demand for Good X	Proportionate change in demand for Good Y	Proportionate change in demand for Good Z
With respect to change in Price X	-0.8	+0.2	+2.1
With respect to change in Price Y	+0.5	-0.1	-1.6
With respect to change in Price Z	+1.7	-0.9	-1.7

- (a) With use of the figures in the above table, explain the relationship between Good Z and Good Y.
- (b) Using the information from the table, explain what will happen to total revenue received from sales of Good X if the price of this product were to fall. [3]

Question 4

An economy operates an income tax system which has the following effects:

	Income Before Tax	Income After Tax
Person A	£10 000	£9 000
Person B	£50 000	£41 000

- (a) Using the table above, explain whether this tax system is progressive or regressive. [2]
- (b) Explain why an increase in the marginal rate of taxation may lead to a fall in hours worked by an individual. [3]

[Total: 20]

Section C

Answer all questions.

Question 5

Read the following extracts and table and then answer the questions that follow.

Extract 1

A good 'job', if you can afford to pay for it!

An intern is someone who works in a temporary position with a focus on 'on-the-job' training rather than merely employment, making it similar to an apprenticeship. An internship may either be paid, unpaid or partially paid.

In the UK there has been a steady growth in the number of internships offered by firms, often, though certainly not exclusively, to recent graduates. Many university students also secure 5 internships during summer vacations with the clear hope that this will put them at an advantage when firms come to undertake recruitment. It is estimated that up to a third of all interns receive no financial payment whatsoever and many others receive just 'expenses', aimed at covering any travel and other miscellaneous expenses incurred in undertaking the internship, but certainly not aimed at providing a living wage. There are examples, particularly in the world of 10 the arts and media industries, where unpaid internships can last for 12 – 18 months.

There has also been a steady growth of agencies specialising in finding internship placements for individuals. These agencies charge fees, usually in the region of several hundred pounds, to arrange these placements.

It is clear that, if undertaking an internship does put an individual at an advantage when it comes to entering the job market, those who have access to private finance are at a great advantage. It is also clear that there is a benefit to firms in reducing the information failure generally encountered in the recruitment process. For both of these reasons, it could therefore be argued that it should become a legal requirement for all interns to receive the National Minimum Wage.

Extract 2

It is now well over a decade since the National Minimum Wage (NMW) was introduced into the UK by the Labour Government in April 1999. The initial rate was £3.60 per hour for those workers aged 22 and over. According to the Office for National Statistics, at that time 8.3% of the workforce was receiving less than the relevant NMW rate. In the run up to its introduction there was considerable opposition from both the business community and the Conservative 5 Party. There were reports that up to 80 000 jobs would be lost over the next two to three years, from an initial workforce in 1999 of 23 million. However, these fears never materialised and indeed within 18 months the Conservatives had withdrawn their opposition to the NMW.

The NMW rates have increased on an annual basis and by 2010 had reached just below £6 per hour – a significant rise in real terms. There is always a balance that needs to be made 10 between the demands of trades unions for the rate to be increased and from employers to keep rates where they are. Similarly it is important that the benefit system should be considered when setting NMW rates, so as to avoid creating poverty traps of the sort that were common before the NMW. This was also considered in the 2010 consultation paper "21st Century Welfare", in which the Government reviewed the whole issue of benefits and work and clearly 15 set out their position with the statement:

"The key must be to break the cycle of dependency. We must make sure that work pays, even for the poorest."

The NMW system has been based on the age of the worker from the start and indeed until 2004 there was no NMW for those workers under the age of 18. The justification for paying 20 younger workers less is based on the belief that they do not have the experience and hence will need more supervision and training. It has also been argued that there needs to be encouragement for firms to take on young workers, as employers are often more wage sensitive when it comes to recruiting young people. This is particularly important in times of high youth unemployment. However, those who were on full-time training schemes were 25 exempt from the legislation and hence many young workers ended up not being covered by the legislation. This changed on 1st October 2010 when for the first time an Apprentice Minimum Wage of £2.50 per hour was introduced for those under 19 and for those over 19 in the first 12 months of their apprenticeship. This was intended to give some protection to such workers and to ensure that firms did not try to prolong apprenticeships too long, in an attempt to avoid 30 coming under the NMW legislation.

However, there has been a rise in recent years of firms offering training in different formats, rather than through an apprenticeship, in an attempt to find other ways of avoiding having to pay young workers a decent wage.

	Adult Rate (for workers aged 22+ until 2010 when this rate applied to those aged 21+)	Development Rate (for workers aged 18 – 21, 18 – 20 from 1 Oct 2010)	16 – 17 Year Olds Rate	Consumer Price Index June 2005 = 100
1 April 1999	£3.60	£3.00		92.4
1 Oct 2001	£4.10	£3.50		94.7
1 Oct 2004	£4.85	£4.10	£3.00	98.4
1 Oct 2007	£5.52	£4.60	£3.40	105.3
1 Oct 2010	£5.93	£4.92	£3.64	115.2

Source: Low Pay Commission and Office for National Statistics

- (a) Using the information in the first paragraph of Extract 2, calculate the number of workers who were receiving less than the relevant NMW rate prior to its introduction, according to the Office for National Statistics. [2]
- (b) Using Table A
 - (i) Calculate the total percentage change in the Development Rate of the NMW between its start in April 1999 and October 2010. [1]
 - (ii) Using this figure and other evidence from the table, confirm that there has been 'a significant rise in real terms' for the NMW as stated in Extract 2. [2]
- (c) 'Similarly it is important that the benefit system should be considered when setting NMW rates, so as to avoid creating poverty traps of the sort that were common before the NMW.' (Extract 2 lines 12 14)
 - (i) Explain what is meant by this sentence.
 - (ii) Using both the extract and your own knowledge explain how this issue has been addressed in recent years. [3]
- (d) Using the evidence provided in Extract 2 lines 19 31 and economic analysis, evaluate the statement that it is right for the NMW to be based upon age and experience. [10]
- (e) Evaluate whether the increased use of internships is beneficial for employers, for potential interns and for the UK economy overall. [10]

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[Total: 30]

[2]

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Table A

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