



**ECONOMICS (PRINCIPAL)**

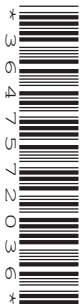
**9772/01**

Paper 1 Multiple Choice, Short Answers and Data Response

**May/June 2015**

**2 hours 15 minutes**

Additional Materials: Answer Booklet/Paper/Multiple Choice Insert sheet



**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 an HB pencil for any diagrams or graphs.  
Do not use staples, paper clips, glue or correction fluid.  
**DO NOT WRITE IN ANY BARCODES.**

Answer **all** questions.

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.

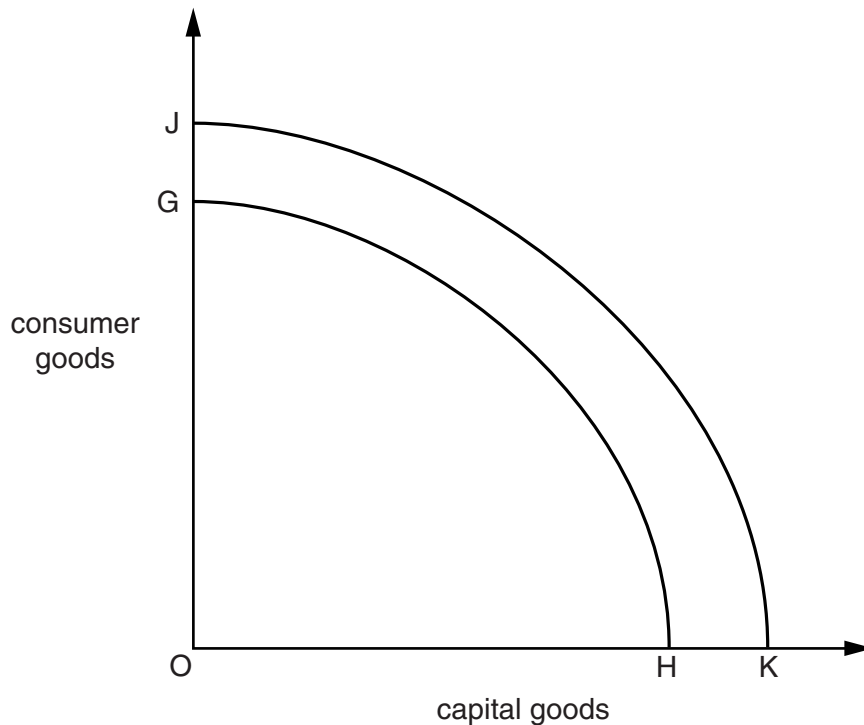
The syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 3 Pre-U Certificate.

This document consists of **19** printed pages, **1** blank page and **1** Insert.

### 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 What is the fundamental economic problem facing all societies?
- A the achievement of economic growth
  - B the allocation of scarce resources between competing ends
  - C the conflict between economic growth and environmental protection
  - D the depletion of non-renewable resources
- 2 In the diagram, GH is an economy's initial production possibility curve.



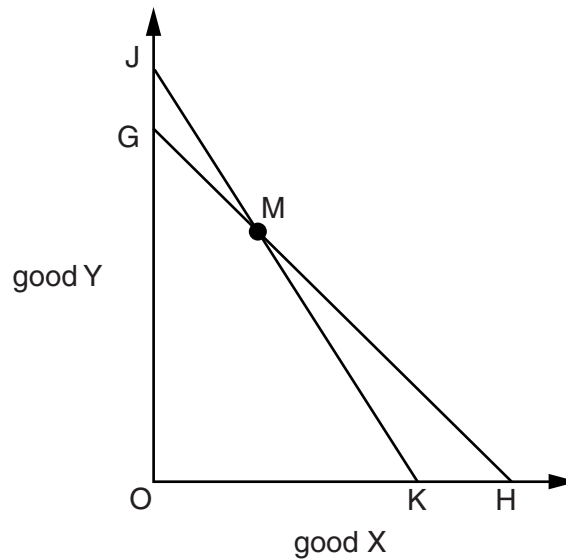
What could cause the curve to shift to JK?

- A an increase in the employment rate
- B an increase in the money supply
- C an increase in net exports
- D net inward migration

- 3 The cross-price elasticity of demand for good X with respect to good Y is  $-0.5$ .

All else remaining unchanged, what will be the effect of a 2% increase in the price of good Y?

- A a 1% decrease in the price of good X  
 B a 1% decrease in the demand for good X  
 C a 1% increase in the price of good X  
 D a 1% increase in the demand for good X
- 4 In the diagram, a consumer chooses the combination of goods X and Y indicated by point M on his initial budget line, JK.



Changes in the prices of X and Y cause his budget line to change to GH.

Which statement about the consumer's economic welfare is correct?

- A He is now worse off since the increase in the price of X is bigger than the reduction in the price of Y.  
 B He is no better or worse off since the increase in the price of Y is exactly equal to the reduction in the price of X.  
 C He is now worse off since the combinations of X and Y along the segment JM of his initial budget line are no longer available to him.  
 D He is now potentially better off since he can now choose a combination of X and Y along the segment MH of his new budget line, which was not previously available to him.

- 5 Goods X and Y are substitutes.

How is a change in the cost of producing good X most likely to affect the demand curve and the supply curve of good Y?

	demand curve	supply curve
<b>A</b>	shift in curve	shift in curve
<b>B</b>	shift in curve	movement along curve
<b>C</b>	movement along curve	shift in curve
<b>D</b>	movement along curve	movement along curve

- 6 The Government of country X announces that the penalties imposed on those found guilty of supplying cannabis are to be increased but that possession of small quantities of cannabis for an individual's personal use will no longer be a criminal offence.

What effect are these changes likely to have on the black market price of cannabis and on the quantity consumed?

	black market price	quantity consumed
<b>A</b>	increase	decrease
<b>B</b>	increase	uncertain
<b>C</b>	uncertain	decrease
<b>D</b>	uncertain	uncertain

- 7 What is a defining characteristic of a private good?

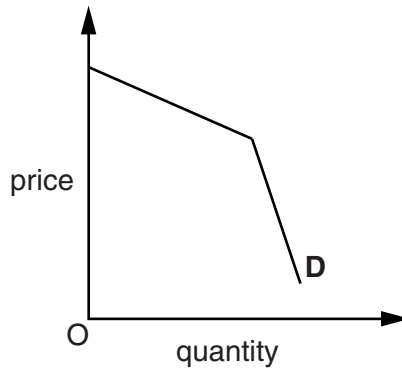
- A** Consumption by one individual reduces the amount of the good available to others.
- B** The benefits derived from the good are confined to those who consume it.
- C** The good is produced within the private sector.
- D** To acquire the good a consumer must be able to afford it.

- 8 A severe economic recession leads to a surge in the number of applications for university places.

What is the most likely explanation for this increase in applications?

- A** a decrease in the opportunity cost of attending university
- B** an increase in graduate starting salaries
- C** an increase in the 18–24 age group participation rate
- D** a decrease in graduate unemployment

- 9 The diagram shows the perceived demand curve facing an oligopolistic firm.

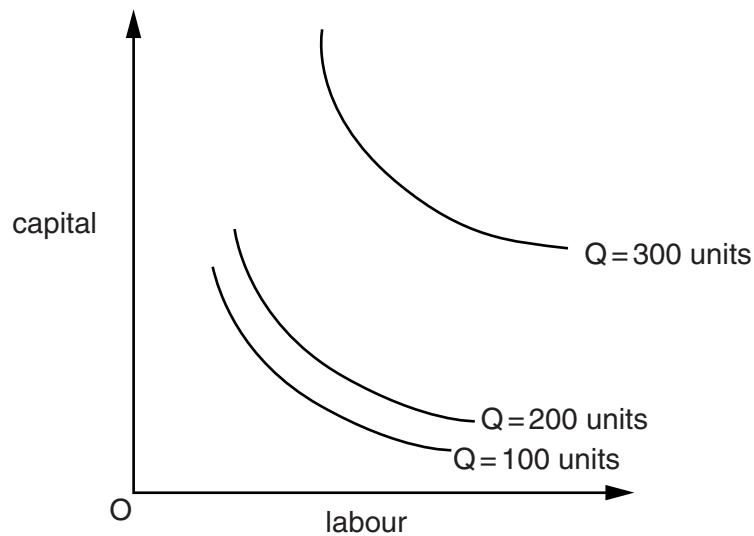


What are the firm's grounds for believing that its demand curve is kinked?

- A** a belief that its competitors will set a price at the kink of the demand curve
- B** a belief that its competitors will match any price increase it makes, but will not match any price reduction
- C** a belief that its competitors will match any price reduction it makes, but will not match any price increase
- D** a belief that its competitors will match any price increase or reduction it makes
- 10 How would the following be classified in a social cost-benefit assessment of the impact of Beijing's toxic air pollution?

	increase in domestic production of air purifiers	increase in sales of pharmaceutical products	increased imports of face masks
<b>A</b>	benefit	benefit	benefit
<b>B</b>	benefit	benefit	cost
<b>C</b>	benefit	cost	cost
<b>D</b>	cost	cost	cost

- 11 The curves in the diagram show the different combinations of capital and labour a firm needs in order to produce given levels of output.



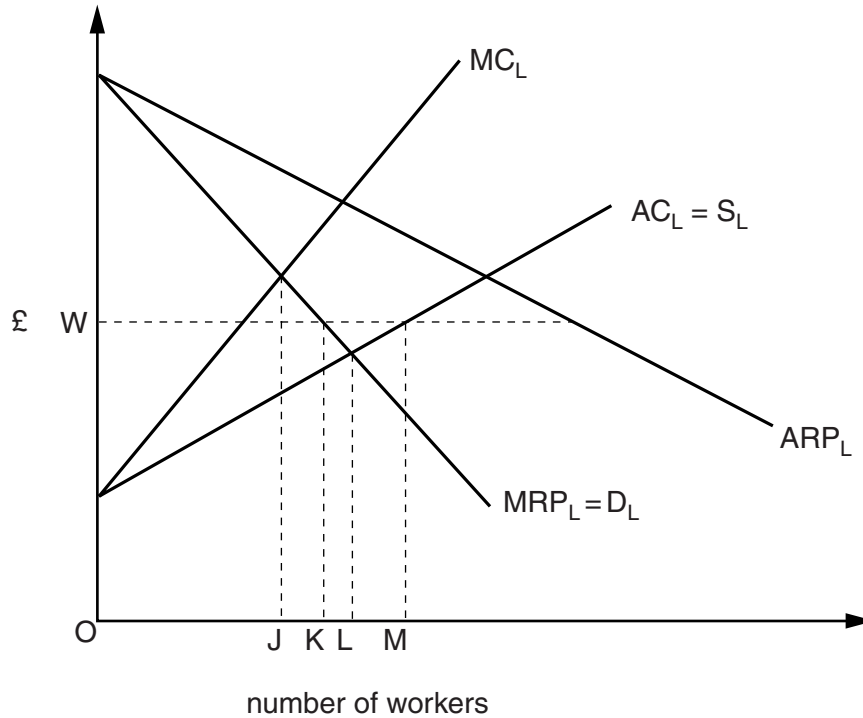
What can be concluded from the diagram?

- A** Over the 100 to 200 units output range, the firm encounters constant returns to scale.
- B** Over the 200 to 300 units output range, the firm encounters constant returns to scale.
- C** Over the 100 to 200 units output range, the firm encounters increasing returns to scale.
- D** Over the 200 to 300 output range, the firm encounters increasing returns to scale.
- 12 What would increase both demand-pull and cost-push inflation in an oil importing country?
- A** a depreciation of the country's currency
- B** an increase in the cost of borrowing
- C** an increase in the price of oil
- D** the removal of import tariffs

- 13 In the diagram, the  $ARP_L$  curve is the average revenue product of labour curve of a profit-maximising monopsonist and the  $MRP_L$  curve is its marginal revenue product of labour curve.

The firm pays its workers the minimum wage,  $OW$ , set by the country's government.

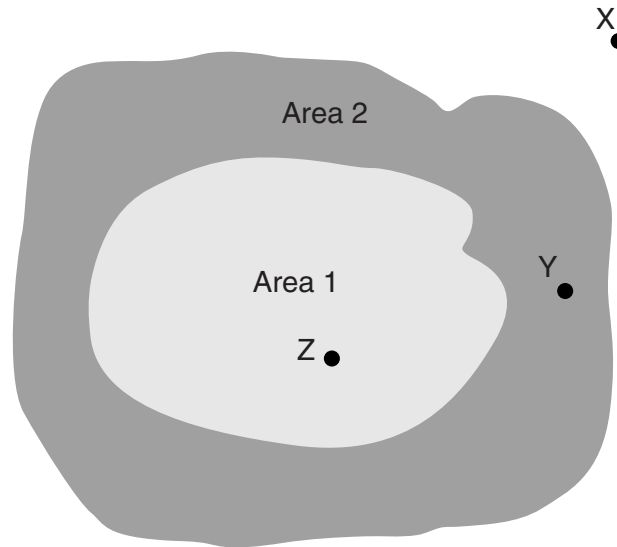
The curves  $AC_L$  and  $MC_L$  show what the firm's average and marginal labour cost curves would be in the absence of government intervention.



What will happen to the number of workers employed by the firm if the minimum wage is abolished?

- A it will increase by JK
- B it will increase by JL
- C it will decrease by JK
- D it will decrease by KM

- 14 At present, motorists who drive their cars within Area 1 shown on the map pay a daily congestion charge of £8. However, motorists who live within the congestion charge zone are eligible for a 90% discount.



Which car journeys would increase in number if the congestion charge zone area was extended to include Area 2?

- A journeys from point X to point Z
  - B journeys from point Z to point Y
  - C journeys from point Y to point X
  - D journeys from point Y to point Z
- 15 A woman gives her husband a weekly housekeeping allowance of £600.

Following their divorce, the woman employs her former husband as a housekeeper at a weekly salary of £500.

What will be the effect of this change in their relationship on the recorded weekly value of Gross Domestic Product (GDP)?

- A a reduction of £500
- B a reduction of £100
- C an increase of £100
- D an increase of £500



- 16 At present a monopolist is required by the industry regulator to charge a price equal to marginal cost.

The table summarises the consequences if the firm were allowed, instead, to maximise its profits.

	£ million
increase in monopoly profits	5
loss of consumer surplus	8

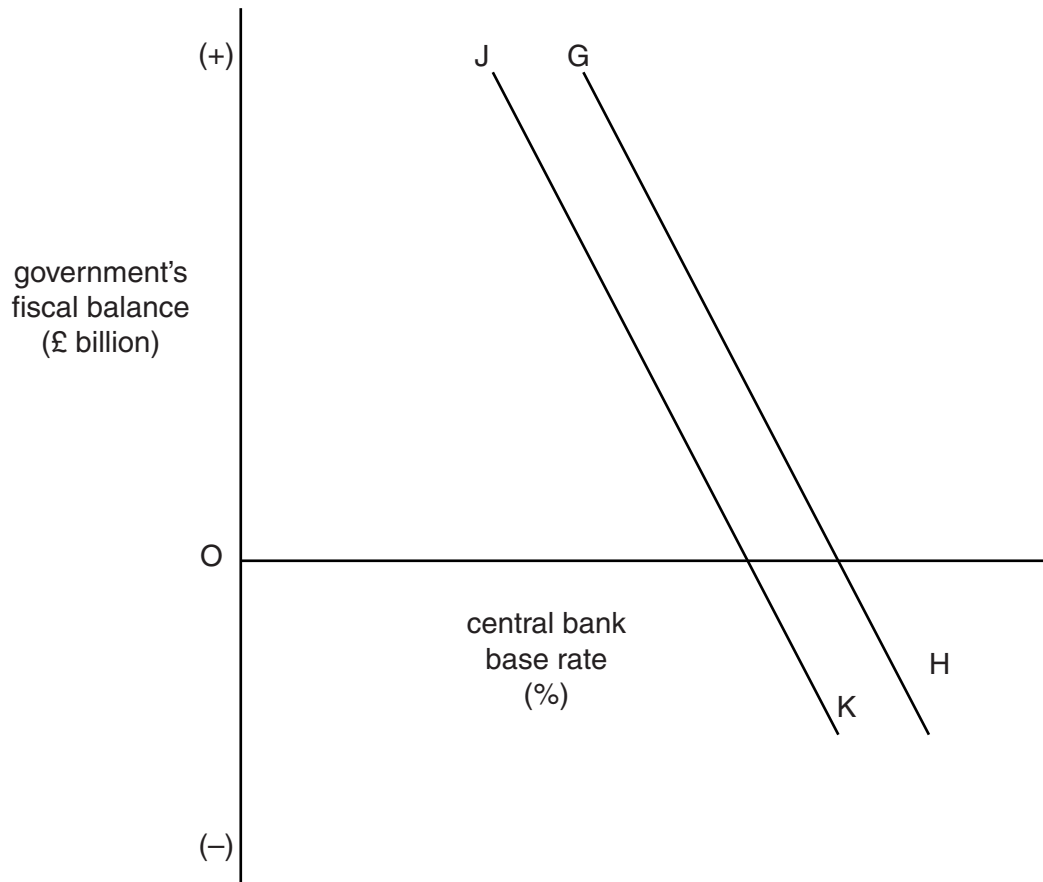
What would be the resulting deadweight loss?

- A £3 million
  - B £5 million
  - C £8 million
  - D £13 million
- 17 What will be one of the likely consequences of Quantitative Easing?
- A a decrease in the liquidity of commercial banks
  - B a decrease in the monetary wealth of the non-bank private sector
  - C a decrease in the cost of borrowing
  - D an increase in the budget deficit
- 18 Since 2010, a country's export prices have increased on average by 40% while its import prices have fallen by 20%.

What is the current figure for the country's terms of trade (2010 = 100)?

- A 120
- B 175
- C 180
- D 200

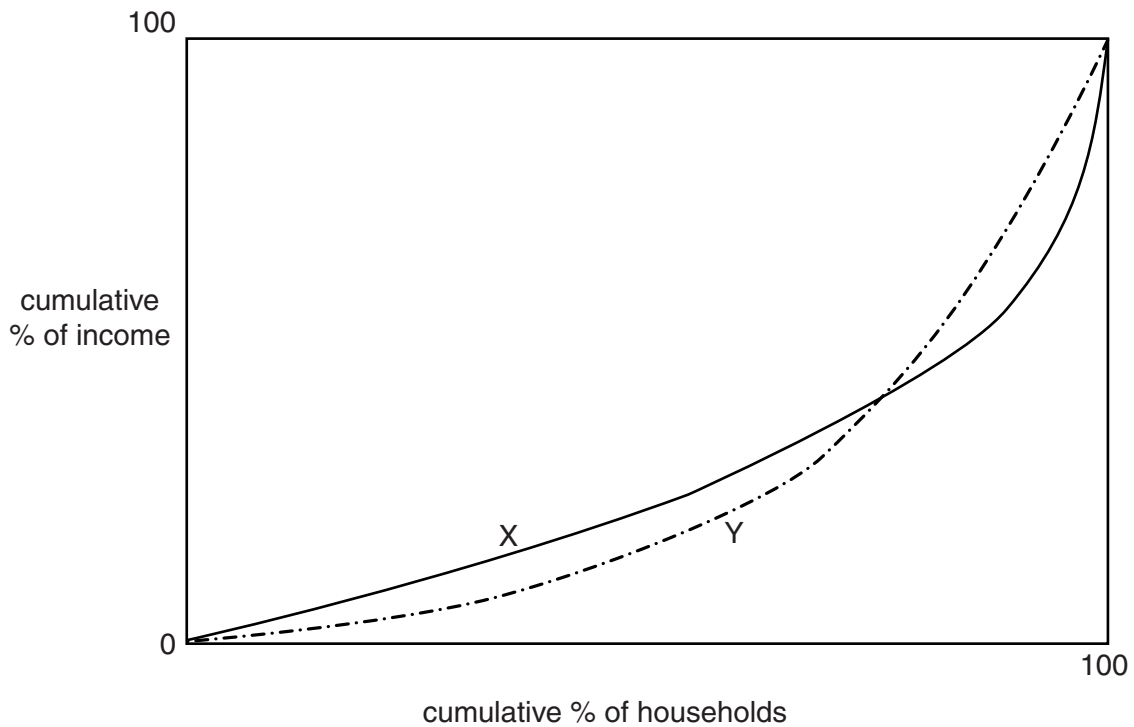
- 19 Curve JK in the diagram shows the different combinations of fiscal and monetary policy a country's central bank believes would enable the country to meet a given inflation target.



What could cause the curve to shift to GH?

- A a depreciation of the currency
- B a fall in commodity prices
- C an increase in labour productivity
- D an increase in the government's target rate of inflation

20 Curve X in the diagram is an economy's initial Lorenz curve.



Which combination of policy changes could cause the Lorenz curve to shift to Y?

	basic state pension	higher rate of income tax
<b>A</b>	decrease	decrease
<b>B</b>	decrease	increase
<b>C</b>	increase	decrease
<b>D</b>	increase	increase

21 In a closed economy with no government, a £1 billion increase in investment leads to a £4 billion increase in consumption.

What is the value of the marginal propensity to consume?

- A**  $\frac{1}{4}$     **B**  $\frac{1}{5}$     **C**  $\frac{3}{4}$     **D**  $\frac{4}{5}$

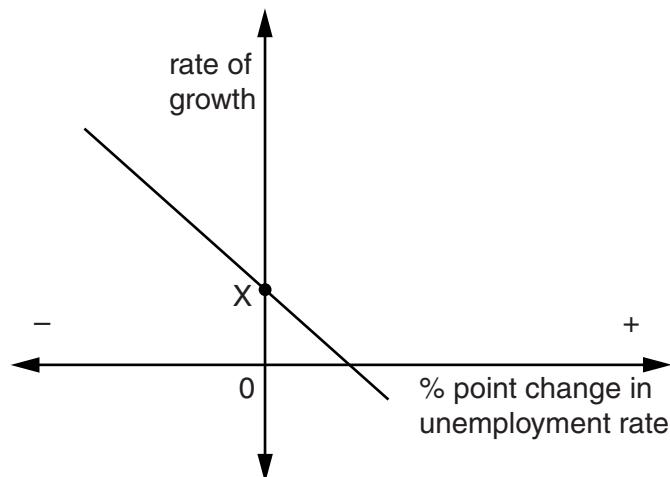
- 22 Which combination of changes will be most likely to strengthen the operation of automatic stabilisers?

	income tax rates	unemployment benefit rates
<b>A</b>	decrease	decrease
<b>B</b>	decrease	increase
<b>C</b>	increase	decrease
<b>D</b>	increase	increase

- 23 A country's money supply increases by 5% and real GDP increases by 2%.

Given that the velocity of circulation of money remains constant, what will be the approximate change in the average price level?

- A** -7%  
**B** -3%  
**C** +3%  
**D** +7%
- 24 The diagram shows the relationship between a country's short-run growth rate and the resulting change in its unemployment rate.



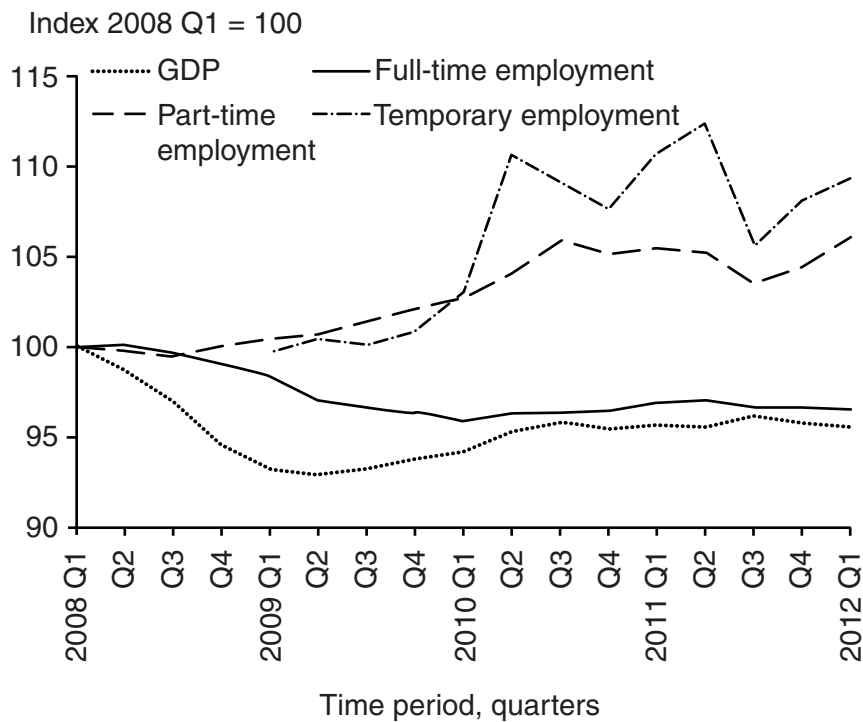
What is true at point X?

- A** Unemployment is at its natural rate.  
**B** The economy is at full employment.  
**C** The short-run growth rate is equal to the potential growth rate.  
**D** The short-run growth rate is equal to the rate of inflation.

25 What is the most likely short-run effect on a country’s inflation and unemployment rate if it abolishes its import tariffs?

	rate of inflation	unemployment rate
<b>A</b>	fall	fall
<b>B</b>	fall	rise
<b>C</b>	rise	fall
<b>D</b>	rise	rise

26 The graph shows the changes in employment and in GDP in the United Kingdom between 2008 and 2012.



Source: ONS

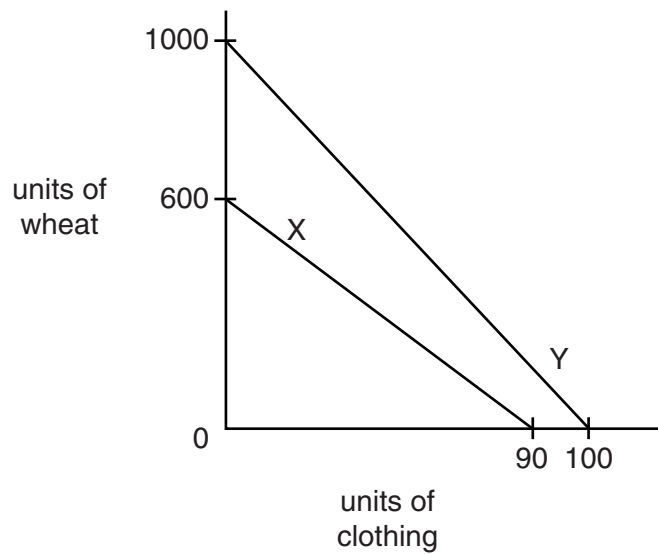
What can be concluded from the graph?

- A GDP fell continuously throughout the period.
- B There was a decrease in GDP per worker over the period.
- C The total number in full-time employment increased over the period.
- D The number working part-time because they were unable to find full-time employment increased over the period.

27 What is one of the shortcomings of comprehensive human development indices?

- A Most of the individual components are not measurable.
- B The weights attached to the individual components are arbitrary.
- C They make no allowance for population growth.
- D They do not take account of inflation.

28 The diagram shows the amounts of wheat and clothing that can be produced in countries X and Y with a given quantity of resources.



What does the diagram indicate about the production of these commodities?

- A Country X has an absolute advantage in the production of clothing.
- B Country X has a comparative advantage in the production of wheat.
- C Country Y has an absolute advantage in the production of clothing.
- D Country Y has a comparative advantage in the production of both commodities.

- 29** Countries W, X and Y are currently members of a customs union; country Z is not a member. Country Y decides to leave the customs union but sets an import tariff at the same level as the customs union's external tariff.

What is the likely impact of country Y's departure from the customs union?

	volume of trade between countries W and X	volume of trade between countries Y and Z
<b>A</b>	increase	increase
<b>B</b>	increase	decrease
<b>C</b>	decrease	decrease
<b>D</b>	decrease	increase

- 30** The government of a developing economy introduces a basic health service available to all citizens free of charge.

How is this likely to affect the country's birth rate and the household saving ratio?

	effect on birth rate	effect on household saving ratio
<b>A</b>	uncertain	decrease
<b>B</b>	uncertain	increase
<b>C</b>	increase	decrease
<b>D</b>	increase	increase

**[Total: 30]**

## Section B

Answer **all** questions.

- 1 (a) Identify **two** conditions necessary for price discrimination to occur. [2]  
 (b) Explain **one** way in which the Internet has affected firms' ability to practise price discrimination. [3]

- 2 A bus company estimates that it faces the following elasticities for a particular journey:

Price elasticity of demand	-2.2
Income elasticity of demand	-0.6

- (a) Using the data, explain why this journey is an 'inferior good'. [2]  
 (b) Explain the likely impact on the bus company if the price of bus tickets rises by 5%. [3]
- 3 How can income and substitution effects be used to explain backward-bending individual labour supply curves? [5]

- 4 An industry consists of two firms, A and B.

The profit-payoff matrix shows how the profits, in £ millions, of A and B vary depending on the prices charged by the two firms.

		price charged by firm A	
		$P_A = £20$	$P_A = £10$
price charged by firm B	$P_B = £20$	$£12m_A$ $£12m_B$	$£15m_A$ $-£2m_B$
	$P_B = £10$	$-£2m_A$ $£15m_B$	$£2m_A$ $£2m_B$

- (a) Explain why, in the absence of collusion, both firms will charge £10. [2]  
 (b) Identify **three** characteristics of an industry that make collusion an unlikely outcome. [3]

[Total: 20]



## Section C

Answer **all** questions.

## Question 5

Read the following article, figure and table and then answer the questions that follow.

**Extract 1: The uncertain link between research and development (R&D) and productivity**

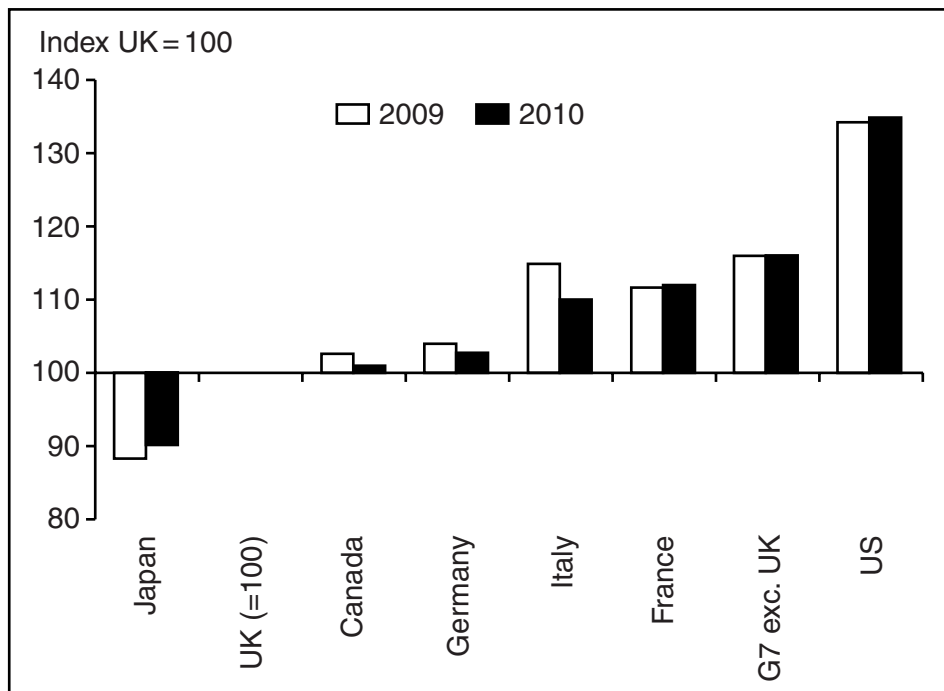
R&D is seen as essential to economic growth, to increase domestic productive capacity and to maintain, or improve, international competitiveness. However, the issue is somewhat complex. Innovators such as Sir James Dyson frequently point out that the Government should do more to incentivise innovation. Nevertheless, his company is reputed to be the second highest filer of UK patents. 5

The relationship between R&D expenditure and productivity is not straightforward. A recent LSE study of UK economic performance concluded that, relative to other major industrialised countries, the UK's performance in the period since 1997 has been impressive. GDP growth between 1997 and 2010 averaged 1.42% per annum above any of the other G7 countries, including Germany (1.26%) and the United States (1.22%). 10

The study also suggested that high levels of foreign direct investment, innovation and entrepreneurship have driven productivity gains. Government policy may also have helped: rigorous competition policy and utility regulation, the growth of university education and immigration are all seen as having had a positive effect on UK productivity.

Nevertheless, there is a case for arguing that UK performance could have been even better: the UK does lag behind in R&D expenditure, and its vocational education is also inferior to that offered in continental Europe. Despite significant structural improvements in the UK economy, focusing on high levels of competition in product markets, openness to foreign direct investment, flexible labour markets, a tax and benefit system that incentivises workers and an effective regulatory regime, the UK could still do better. 15 20

The Government clearly has a role to play in determining the direction of the economy, establishing the regulatory regime, building both infrastructure and human capital and, as Dyson suggests, encouraging innovation. In the UK the ratio of public sector R&D to GDP has fallen from 0.31% in 1986 to 0.17% in 2009, and the private sector has been left to compensate for this fall. However, as every economist knows, because of the positive externalities associated with R&D activity, it is inevitable that private firms will underinvest in R&D. 25

**Figure 1: GDP per worker, G7 countries ranked by 2010 performance**

Source: ONS International Comparisons of Productivity, March 2012

**Table 1: Research and Development (R&D) Expenditure as a % of GDP and % Real GDP growth, 2006 and 2010**

	2006		2010	
	R&D Expenditure as % of GDP	% Real GDP growth	R&D Expenditure as % of GDP	% Real GDP growth
<b>Germany</b>	2.5	3.7	2.8	3.7
<b>Japan</b>	3.4	1.7	3.3	4.4
<b>South Korea</b>	3.0	5.2	3.7	6.3
<b>UK</b>	1.7	2.6	1.8	1.8
<b>US</b>	2.7	2.7	2.8	3.0

Source: adapted from OECD website ([www.oecd-ilibrary.org](http://www.oecd-ilibrary.org))

- (a) With reference to Figure 1, compare Japanese and Italian GDP per worker relative to the United Kingdom in 2010. [2]
- (b) Explain the term 'international competitiveness' (Extract 1, line 2). [3]
- (c) What type of relationship would you expect there to be between the level of R&D expenditure and the long-term rate of growth of GDP? Explain your answer with reference to Table 1 and Extract 1. [5]
- (d) With reference to the information provided and your own knowledge, evaluate whether R&D is best funded by the state or by the private sector. [10]
- (e) With reference to Extract 1 and your own knowledge, evaluate the degree to which a government can play a significant role in areas other than R&D in increasing a nation's international competitiveness. [10]

**[Total: 30]**

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