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

## ECONOMICS

Paper 1 Multiple Choice, Short Answers and Data Response
9772/01
May/June 2010
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.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use paper clips, highlighters, glue or correction fluid.
Answer all questions.
You may use a calculator.

At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

## 2

## 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 both the number of the question and your choice of answer clearly in your Answer Booklet.

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

1 The diagram shows an economy's production possibility curve.


Why does the curve slope downwards?
A Agriculture and industry are subject to decreasing returns to scale.
B Resources are equally well suited to industrial and agricultural production.
C Resources are shared equally between industrial and agricultural production.
D Total resources available to the economy are finite.

2 The winner of a TV quiz show is offered a choice of either $£ 1000$ or the contents of one or other of two sealed boxes. She is told that one box contains $£ 2500$ and that the other box is empty.

What is the opportunity cost to the individual of opting for the $£ 1000$ prize?
A a $50 \%$ chance of winning $£ 2500$
B a $50 \%$ chance of winning $£ 1500$
C a $50 \%$ chance of losing $£ 1500$
D a $50 \%$ chance of losing $£ 1000$

3 What is not one of the roles performed by the price mechanism?
A to communicate information about scarcity
B to co-ordinate economic activity
C to guide individuals' choices
D to ensure an equitable distribution of resources

4 The diagram shows an individual's indifference curve.


What does the slope of the curve measure?
A the different combinations of goods X and Y between which the individual is indifferent
$B$ the opportunity cost to the individual of consuming one more unit of good $X$
C the amount of good $Y$ the individual is willing to give up to obtain one more unit of good $X$
D the ratio of the price of good $X$ to the price of $\operatorname{good} Y$

5 A firm's elasticity of supply is 0.4 . At the original market price of $£ 10$ the quantity supplied by the firm is 400 units.

The market price then rises to $£ 11$.
What will be the firm's revenue after the rise in price?
A $£ 3840$
B $£ 4160$
C $£ 4400$
D $£ 4576$

6 The diagram shows a firm's average total cost curve (ATC).


Which diagram shows the firm's corresponding short-run marginal cost curve?
A





7 What is the essential feature of a contestable market?
A ease of entry and exit
B interdependence between firms
C large number of buyers and sellers
D product homogeneity

8 The diagram shows the cost and revenue curves of a monopolist.


If he decides to maximise sales revenue, subject to the constraint that profits do not fall below normal profit, which level of output will he produce?
A $\mathrm{OQ}_{1}$
B $\quad \mathrm{OQ}_{2}$
C $\mathrm{OQ}_{3}$
D $\mathrm{OQ}_{4}$

9 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.


In the absence of collusion, what will be X 's profits?
A $-£ 2$ million
B zero
C $£ 5$ million
D $£ 9$ million

10 In the diagram, $\pi$ is the marginal profit derived by a firm from successive units of output.
E indicates the external cost in the form of pollution inflicted on the rest of society by successive units of output.


In the absence of negotiations between the affected parties, which outputs will be produced in the circumstances indicated in the table?

|  | firm has a legal <br> right to pollute | public has a legal right <br> to prevent pollution |
| :---: | :---: | :---: |
| A | $\mathrm{OQ}_{1}$ | $\mathrm{OQ}_{1}$ |
| B | $\mathrm{OQ}_{1}$ | $\mathrm{OQ}_{2}$ |
| C | $\mathrm{OQ}_{2}$ | zero |
| D | $\mathrm{OQ}_{2}$ | $\mathrm{OQ}_{2}$ |

11 The diagram shows the demand curve of a recreational facility, the consumption of which is non-rival.


The facility is operated by the government and users are initially charged $£ 10$, which provides just sufficient revenue to cover the cost of providing the facility.

What would be the increase in consumer surplus and the cost to the taxpayer if the government makes the facility available free of charge?

|  | increase in consumer surplus | cost to taxpayer |
| :---: | :---: | :---: |
| $£$ | $£$ |  |
| A | 100 | 1000 |
| B | 100 | 1200 |
| C | 1100 | 1000 |
| D | 1100 | 1200 |

12 A country's energy producers are given permits which allow each producer to emit a given volume of pollution.

What will be the effect on the volume of pollution and on the cost of pollution control of allowing the producers to trade the permits amongst themselves?

|  | effect on volume <br> of pollution | effect on cost of <br> pollution control |
| :---: | :---: | :---: |
| A | increase | no change |
| B | increase | decrease |
| C | no change | decrease |
| D | no change | no change |

13 A cost-benefit study estimates that building a new road bridge would produce a net social benefit of $£ 10$ million.

However, an investment appraisal carried out on behalf of a private construction company concludes that the bridge would not be profitable.

What could explain this?
A A lower discount rate was used in the private investment appraisal.
B Building the bridge will give rise to negative externalities.
C The benefits to potential users are non-excludable.
D Total user benefits will be greater than the amount paid in toll charges.

14 In which situation is a trade union most likely to be able to negotiate a wage increase for its members employed in a local firm without a resulting loss of jobs?

A There is large-scale local unemployment.
B The firm's labour costs are a high proportion of its total costs.
C The firm has a monopsony position within the local labour market.
D The demand for the firm's product is price-elastic.

15 After a certain point, an increase in the average wage earned in an economy reduces the total quantity of labour hours supplied.

What could explain this response?
A the substitution of other goods for leisure
B an income effect outweighing a substitution effect
C leisure being regarded as an inferior good
D a decrease in the marginal product of labour

16 What might explain why a country's GDP remains unchanged despite a rise in labour productivity?

A an increase in average hours worked per week
B an increase in the birth rate
C an increase in the retirement age
D an increase in the student population

17 What would be most likely to cause a decrease in aggregate demand?
A the removal of import quotas
B an increase in the rate of unemployment benefits
C an increase in the female participation rate
D the removal of immigration controls

18 Assuming no change in real aggregate expenditure on goods and services, what could cause an increase in unemployment?

A a decrease in labour productivity
B a decrease in the population of working age
C an increase in the participation rate
D net outward migration

19 The table shows the price indices and weights for three commodity groups that are included in the calculation of a country's cost of living index.

| commodity <br> group | index | weight |
| :---: | :---: | :---: |
| X | 300 | 4 |
| Y | 140 | 3 |
| Z | 80 | 3 |

By how much has the cost of living increased since the base year?
A $52 \%$
B $86 \%$
C $186 \%$
D $198 \%$

20 Which combination of changes is most likely to result in an increase in a country's rate of inflation?

|  | exchange rate | indirect taxes | money supply |
| :---: | :---: | :---: | :---: |
| A | falling | falling | falling |
| B | falling | rising | rising |
| C | rising | rising | falling |
| D | rising | falling | rising |

21 The four Lorenz curves in the diagram show the distribution of household income in four different countries.

Which country has the greatest degree of income inequality as measured by the Gini Coefficient?


22 In a given year a country attracts a net inflow of foreign investment, resulting in a surplus in the capital and financial accounts of the balance of payments.

What must simultaneously occur?
A an excess of domestic savings in relation to aggregate investment
B a decrease in the domestic rate of inflation
C a current account balance of payments deficit
D a government budget surplus

23 In an economy, the proportion of the working age population in employment increases from $70 \%$ to $80 \%$.

What is likely to be the effect on output per worker and on GDP per head?

|  | output per worker | GDP per head |
| :---: | :---: | :---: |
| A | increase | increase |
| B | increase | decrease |
| C | decrease | increase |
| D | decrease | decrease |

24 In a closed economy, households pay $£ 0.25$ in tax on every $£ 1$ increase in their gross income, and spend $4 / 5$ of every increase in their disposable income.

What is the value of the multiplier?
A 2
B $2^{1} / 2$
C 3
D 5

25 The table shows the marginal utility derived by a consumer who devotes the whole of his weekly income of $£ 32$ to two goods X and Y , whose unit prices are $£ 2$ and $£ 4$ respectively.

| unit | marginal utility <br> of $X$ (units) | marginal utility <br> of $Y$ (units) |
| :---: | :---: | :---: |
| 1 | 9 | 22 |
| 2 | 8 | 20 |
| 3 | 7 | 18 |
| 4 | 6 | 16 |
| 5 | 5 | 14 |
| 6 | 4 | 12 |
| 7 | 3 | 10 |
| 8 | 2 | 8 |

In order to maximise his utility, which quantities of X and Y should the consumer purchase?

|  | X | Y |
| :---: | :---: | :---: |
| A | 2 | 7 |
| B | 4 | 6 |
| C | 6 | 4 |
| D | 8 | 3 |

26 Curve GH 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 JK?
A a depreciation of the currency
B a new forecast predicting higher levels of unemployment
C an increase in the standard rate of income tax
D an increase in the government's target rate of inflation

27 The diagram shows the amounts of wheat and clothing that can be produced in countries $\mathbf{X}$ and $\mathbf{Y}$ with a given quantity of resources.


What does the diagram indicate about the production of these two commodities?
A Both countries have an absolute advantage in the production of clothing.
B Both countries have a comparative advantage in the production of clothing.
C Country $\mathbf{X}$ has a comparative advantage in wheat and an absolute advantage in clothing.
D Country $\mathbf{Y}$ has both an absolute and a comparative advantage in clothing.

28 Country X joins an existing customs union, comprising Y and W , which has a common external tariff equal to $X$ 's initial tariff.

After joining the customs union, X imports cars from Y that it previously imported from country V .

How will this affect the price paid by consumers in country $X$ and the average cost of car production?

|  | price | cost of production |
| :---: | :---: | :---: |
| A | lower | higher |
| B | lower | no effect |
| C | no effect | lower |
| D | no effect | no effect |

29 The diagram shows the supply and demand of the $£$ sterling on the foreign exchange market.

$$
\begin{gathered}
\$: £ \\
\text { exchange } \\
\text { rate }
\end{gathered} \begin{gathered}
2.50
\end{gathered}
$$

What should the UK monetary authorities do to achieve an exchange rate of US $\$ 2.50=£ 1$ ?
A buy $£ 5$ billion of sterling
B buy $£ 10$ billion of sterling
C sell $£ 5$ billion of sterling
D sell $£ 10$ billion of sterling

30 An economy is currently in equilibrium at point $X$.
A cut in direct tax rates increases disposable income and has a positive effect on the incentive to work.

Which point shows the new equilibrium in the economy?


## Section B

Answer all questions.

## Question 1

Real GDP per head is often used as an indicator of the standard of living.
(a) Why do we use 'real' values for this purpose?
(b) With the use of an example, explain why the distribution of income is also of relevance when comparing the standard of living in different countries.

## Question 2

(a) Using an example, explain the term 'seasonal unemployment'.
(b) Using an example, explain what can give rise to structural unemployment.

## Question 3

(a) Explain the likely implications for the price competitiveness of UK exports and imports if the sterling exchange rate appreciates.
(b) Explain why time lags are important when considering the effect that such an appreciation will have on the current account of the balance of payments of the UK.

## Question 4

(a) Explain the phrase 'fiscal deficit'.
(b) With the use of examples, explain why a government's fiscal position is likely to worsen during a recession.

## Section C

Answer all questions.

## Question 5

Look at the following article and table and then answer the questions.
From Wrexham to Eastbourne and in virtually every part of the country, the demand for allotment space is rising much faster than local councils can supply. The economics of having your own allotment land have changed significantly in the last few years. Allotments peaked in popularity in the immediate post-war years as people looked to grow their own food in order to reduce the effects of food shortages and government-imposed rationing. But gradually the number of allotments declined as the food availability improved, real prices fell and the number of supermarkets expanded. By the 1980s using an allotment was widely regarded as the preserve of the 'Good Life' crowd and those in retirement wanting a way to pass the time.

But now the combined effect of rising food prices, growing concerns over the environmental effects of food miles and demand for locally-grown organic produce has prompted a fresh wave of demand for scarce allotment space.

Sadly the supply of plots is inelastic. Long and lengthy waiting lists have remained the method of choice for dealing with this imbalance between supply and demand. In some parts of our major towns and cities there are no allotments at all as land has been sold to private property developers by local councils strapped for cash. Councils are legally obliged to provide 15 allotments per 1000 households and, under current rules, no more than six people are allowed to be waiting for a plot at any one time.

Another non-market approach has been to divide up current allotment space into smaller plots so that more people can have access to one. Another has been to give beginners smaller areas of land.

If demand is running well ahead of supply, the market approach would be to raise the annual rent or perhaps introduce an auction system for allotment land as it becomes available. However, charging market prices might have equity considerations especially when a large number of people tending their plots are elderly and on low incomes. In Harlow, for example, the cost of renting a plot is typically just $£ 18.00$ for the whole year, with concessions given for pensioners or those on benefit.

Looking ahead, if food prices are to remain high and councils and the government are truly serious about improving access to land for people to grow their own fruit and vegetables as a means of improving health, the approach must be to make more land available. This could be done by turning brownfield land in urban areas back into land that is available for cultivation. A

Table 1: Estimated elasticities for the UK

| Change in | Demand for <br> supermarket food | Demand for <br> allotments |
| :---: | :---: | :---: |
| Price of supermarket food | -0.3 | +0.8 |
| Rent for allotments | +0.2 | -0.4 |

(a) According to the article, what was the cause of the peak in demand for allotments?
(b) (i) Using Table 1, calculate the effect on the demand for allotments if the price of supermarket food rises by $10 \%$.
(ii) Explain why a change in the price of food has an effect on the demand for allotments.
(c) The article mentions two possible 'market solutions' to the problem of excess demand for allotments (lines 21-22). With the aid of a diagram, analyse how one of these solutions could be used to reduce this problem.
(d) Consider how far the 'non-market' approaches (lines 12-20) may provide an effective solution to the problem of excess demand.
(e) To what extent do you agree with the proposal of the author in the final paragraph that more land should be made available for allotments?

## BLANK PAGE

## BLANK PAGE

## BLANK PAGE

## Copyright Acknowledgements:

Question 5 © Geoff Riley; Demand for Allotments - Economics in the News; www.tutor2u.net/blog/index.php/economics/comments/cross-elasticity-demand-for-allotments/\#extended; accessed 7/7/08.

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

University of Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.

