

A S S E S S M E N T and Q U A L I F I C A T I O N S A L L I A N C E

Mark scheme June 2003

GCE

Economics

Unit ECN1

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ECN1/1

This component is an objective test for which the following list indicates the correct answers used in marking the candidates' responses.

1.	D	9.	С
2.	D	10.	A
3.	Α	11.	B
4.	В	12.	С
5.	С	13.	B
6.	D	14.	B
7.	Α	15.	A
8.	D		

ECN1/2

General Instructions

Marks awarded to candidates should be in accordance with the following mark scheme and examiners should be prepared to use the full range of marks available. The mark scheme for most questions is flexible, permitting the candidate to score full marks in a variety of ways. Where the candidate's response to a question is such that the mark scheme permits full marks to be awarded, full marks **MUST** be given. A perfect answer is not necessarily required for full marks. But conversely, if the candidate's answer does not deserve credit, then no marks should be given.

Occasionally, a candidate may respond to a question in a reasonable way, but the answer may not have been anticipated when the mark scheme was devised. In this situation, **OR WHENEVER YOU HAVE ANY DOUBT ABOUT THE INTERPRETATION OF THE MARK SCHEME**, you must in the first instance telephone your team leader to discuss how to proceed.

Two approaches have been used in the construction of the mark scheme for the data response questions:

- (i) An 'issue' based approach. The mark scheme for parts (a) and (b) of the data response questions adopts this approach. The mark scheme lists the marks that can be awarded for particular issues (and associated development) that the candidate might include in the answer. Marks awarded for development should take into account the Quality of Written Communication used by candidates as indicated on page 8 of this mark scheme.
- (ii) A 'levels' approach. This approach is used for marking part (c) of the questions. The mark scheme summarises the information required to answer the question, but without attaching marks to particular issues. Marks should be awarded according to whether the answer displays the skills indicated by the five Mark Band Descriptors or "Levels of Skill" included in the mark scheme. The Mark Band Descriptors are set out on page 7. When using a 'levels' mark scheme the marker **must** identify where a particular skill is being demonstrated. The key to be used to identify the skill is shown on page 8. The level chosen should be the one which best fits the answer provided by the candidate. It is not intended that the answer should satisfy every statement in the level description.

APPLYING THE 'LEVELS' MARK SCHEME

Levels of Response Mark Band Descriptors

In part (c) of the data response questions approximately half the marks are available to award to candidates who demonstrate that they can 'evaluate economic arguments and evidence, and make informed judgements'. It is not necessary that the candidate identifies a wide range of issues. As indicated below, the Quality of Written Communication used should be taken into account when awarding the marks.

Level 1

Few, if any, relevant issues are recognised. Economic concepts and principles are not adequately understood or applied to the question. No satisfactory analysis or evaluation. A poorly organised response which generally fails to answer the question. Descriptions and explanations lack clarity. Spelling, punctuation and grammar may be poor. There is little use of economic terminology.

0 to 3 marks Mid-Point: 2 marks

Level 2

One or more relevant issues are recognised. An attempt is made to use basic economic concepts to answer the question but the candidate's explanation may become confused. There may be some attempt to present alternative points of view but any attempt at evaluation is superficial. The answer is likely to be poorly organised and is unlikely to have a clear structure. The candidate demonstrates some ability to spell commonly used words and to follow the standard conventions of punctuation and grammar. Some use of economic terminology is made but this is not always applied appropriately.

4 to 6 marks Mid-Point: 5 marks

Level 3

Two or more relevant issues are recognised. The candidate has made a reasonable attempt to apply economic concepts and ideas. A satisfactory understanding of some basic economic concepts and theories is demonstrated. There will be some attempt to present alternative views and to evaluate the issues, arguments and/or data. There is some logic and coherence in the organisation of the answer. The candidate is generally able to spell commonly used words and usually follows the standard conventions of punctuation and grammar. Some descriptions and explanations are easy to understand but the answer may not be expressed clearly throughout. There is some evidence of the correct use of relevant economic terminology. **7 to 9 marks**

Mid-Point: 8 marks

Level 4

Two or more relevant issues are identified. Good understanding of some basic economic concepts and models is demonstrated. The candidate is able to apply these concepts and models to help answer the question. An appreciation of alternative points of view is shown. Satisfactory use is made of evidence and/or theoretical analysis to evaluate the issues/arguments identified and to support conclusions. Spelling is generally accurate and the standard conventions of punctuation and grammar are usually followed. The answer is well organised. Descriptions and explanations are usually clearly expressed. Appropriate use is made of relevant economic terminology. **10 to 12 marks**

Mid-Point: 11 marks

Level 5

Three or more relevant issues are identified. Good understanding of basic economic concepts and models is demonstrated throughout. The candidate is able to apply these concepts and models to help answer the question. Clear understanding of alternative points of view is shown. Good use is made of evidence and/or theoretical analysis to evaluate the issues/arguments identified and to support conclusions. Spelling is generally accurate and the standard conventions of punctuation and grammar are usually followed. The answer is well organised. Descriptions and explanations are clearly expressed. Appropriate use is made of relevant economic terminology.

Mid-Point: 14 marks

THE KEY TO BE USED WHEN USING THE 'LEVELS' MARK SCHEME

- **D** Where a particular economic term is correctly **DEFINED** in order to help the candidate to answer the question properly.
- I Where a relevant **ISSUE** is raised by the candidate.
- **K** Where the candidate demonstrates **KNOWLEDGE** of recent developments or features of the economy which help enhance the candidate's response to the question. This should also be used where the candidate quotes relevant examples.
- Ap Where the candidate demonstrates the ability to APPLY knowledge and CRITICAL UNDERSTANDING to problems and issues.
- **A** Where the candidate demonstrates the ability to **ANALYSE** the problem using appropriate economic ideas.
- **E** Where the candidate **EVALUATES** and makes judgements about the significance of various issues and arguments.

QUALITY OF WRITTEN COMMUNICATION

The Mark Band Descriptors, which are used for assessing part (c) of the questions, incorporate statements which relate to the Quality of Written Communication used by the candidates.

However, it is also important to assess Quality of Written Communication **whenever** candidates produce answers using continuous prose. When applying an issue based mark scheme, examiners must take into account the following when deciding how many marks to award for development:

- (i) use of appropriate form and style of writing to organise relevant information clearly and coherently;
- (ii) use of specialist vocabulary, where appropriate;
- (iii) legibility of handwriting;
- (iv) accuracy of spelling, punctuation and grammar.

EITHER

1

Total for this question: 25 marks

1 (a) Compare the changes in the price and stocks of copper, shown in **Extract A**, that occurred between January and November 2001. (4 marks)

For candidates who:

identify the inverse relationship between price and stocks over the period	1 mark
use relevant statistics on both price and stocks to describe or illustrate the inverse relationship	Up to 3 marks
make any other relevant statement about the change in price e.g. for most of the period any increase in price was soon followed by a greater fall; at the end of the period, the price rose significantly but was again falling at the end of the period	1 mark per point
make any other relevant statement about the change in stocks e.g. the 'stepped' nature of the increase in stocks	1 mark per point

Do not give marks for explanation of *causes* of the changes

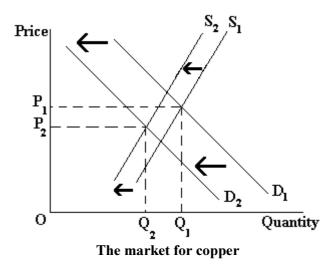
Maximum of 2 marks if no overview or identification of the inverse relationship

Maximum of 2 marks if no relevant use is made of the statistics

MAXIMUM FOR PART (a) 4 MARKS

1 (b) Using a demand and supply diagram and the information in **Extracts A and B**, explain the change that occurred in the price of copper during 2001. (6 marks)

The expected diagram will show an initial equilibrium disturbed by the demand curve shifting leftward, bringing about a new equilibrium at a lower equilibrium price and a lower quantity. With accurate explanation, such an answer can earn full marks, without explaining also that the text indicates a leftward shift of supply that is insufficient to offset the effect of the leftward shift of demand.



For candidates who:

accurately show an initial equilibrium on a fully-labelled D & S diagram	1 mark
illustrate the fall in price in relation to the demand curve shifting leftward	Up to 2 marks
illustrate a leftward shift of supply insufficient to offset the shift of demand	1 mark
provide an explanation of the shift in supply	1 mark
provide a written explanation of the effect of the shift in demand	Up to 2 marks
plus 1 further mark for explaining the fall in price to eliminate excess supply	1 mark

Maximum of 3 marks if the leftward shift of demand is not recognised

Maximum of 3 marks if there is no diagram or a diagram but no written explanation

MAXIMUM FOR PART (b) 6 MARKS

1 (c) In the light of the negative externalities produced by the recycling process, assess the view that only newly-mined copper, and **not** recycled copper, should be used as an industrial raw material.

(15 marks)

Extract C gives three prompts for benefits (efficiency of the use of copper, energy savings, and the contribution of recycling to the sustainable use of resources) and two costs (atmospheric omissions and waste dumped in rivers). Full marks can be achieved by analysing two benefits and two costs and by displaying evaluatory skills in the justification.

To achieve more than 7 marks candidates will need to show that they can use the data provided to make plausible judgements about the relative significance of the benefits and costs and whether the benefits exceed the costs. Very good answers may state the point, and then develop its implications, that the passage does not mention negative externalities produced in the refining and processing of newly-mined copper. Presumably there are costs and/or negative externalities involved which will influence any conclusion with regard to recycled copper.

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Issues and areas for discussion include:

- efficiency arguments
- energy conservation arguments
- resource depletion and sustainability
- resource degradation (negative externality) arguments
- effects on countries, including developing countries, mining copper
- market failure arguments
- government failure arguments
- how benefits and costs might be measured/estimated

USE THE LEVELS MARK SCHEME ON PAGES 7 & 8

MAXIMUM FOR PART (c) 15 MARKS

OR

2

Total for this question: 25 marks

2 (a) **Figures 1 and 2** in **Extract D** show the price of a packet of cigarettes, and the tax per packet, in countries with different average incomes. Compare cigarette prices and taxes in the different groups of countries. (4 marks)

For candidates who:

state that the price including tax is higher, the higher the average income	1 mark
provide an accurate statistical comparison of at least two groups of countries to substantiate this point	1 mark
state that the tax revenue per pack is higher, the higher the average income	1 mark
provide an accurate statistical comparison of at least two groups of countries to substantiate this point	1 mark
state that tax as a proportion or percentage of price is higher, the higher the average income	1 mark
provide an accurate statistical comparison of at least two groups of countries to substantiate this point	1 mark

Do not give marks for explanation of *causes* of the different price and tax levels

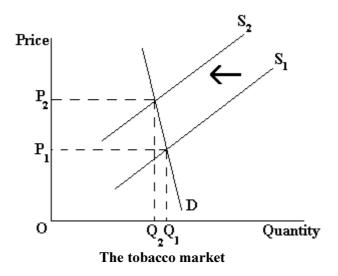
Maximum of 2 marks if no overview or identification of the positive or direct relationship between income and price and/or tax levels

Maximum of 2 marks if no relevant use is made of the statistics

MAXIMUM FOR PART (a) 4 MARKS

2 (b) Using a demand and supply diagram and the concept of elasticity, explain why a tobacco tax may be relatively ineffective in reducing consumption of cigarettes (Extract E, lines 11-12). (6 marks)

The expected diagram will show an initial equilibrium disturbed by the supply curve shifting leftward as the tax is imposed, bringing about a new equilibrium at a higher equilibrium price and a lower quantity. To earn full marks the demand curve must be relatively inelastic and the written explanation must relate to the effect on demand for tobacco of inelastic demand.



For candidates who:

accurately show an initial equilibrium on a fully-labelled D & S diagram	1 mark
illustrate a rise in price and fall in quantity bought in relation to the supply curve shifting leftward	Up to 2 marks
provide a written explanation of the effect of a shift of supply	Up to 2 marks
provide an explanation of the significance of the inelastic demand curve	Up to 2 marks
bring in any other relevant point into the explanation e.g. the elasticity of the supply curve, effect on the government's total tax revenue etc.	Up to 1 mark per point

Note: Candidates can pick up 3 marks for the diagram even if the demand curve is not obviously inelastic, but the significance of inelastic demand must be explained for an answer to score more than 5 marks

Maximum of 3 mark for the whole answer if the leftward shift of supply is not identified

Maximum of 2 marks for the diagram if no supply curves are drawn

Maximum of 3 marks if there is no diagram or a diagram but no written explanation

MAXIMUM FOR PART (b) 6 MARKS

2 (c) Evaluate the economic case **for** and **against** the UK government further increasing the tax on tobacco in order to reduce smoking. *(15 marks)*

Extract E gives two prompts for the 'case for' (smokers paying the cost of their pleasures, and to encourage smokers quitting) and two prompts for the 'case against' (by causing smokers to die earlier, tobacco consumption saves the government money, and tobacco taxation results in the poor subsidising the better-off). Full marks can be achieved by explaining and analysing these arguments together with evaluation of the relative merits of the arguments backed up by evidence and/or reasoning. Reward also identification, explanation and analysis, and evaluation of other arguments not prompted by the passage, such as negative externality and demerit good arguments ('case for') and the promotion of smuggling and 'black markets' ('case against').

To achieve more than 7 marks candidates will need to show that they can use the data provided to make plausible judgements about the relative significance of the 'case for' and 'case against' and whether the 'case for' is stronger than the 'case against'. Very good answers may go beyond the arguments prompted by the passage, but as already indicated, very full development, analysis and evaluation of these points without the introduction of additional arguments, can, if very well done, earn full marks.

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Issues and areas for discussion include:

- tobacco as a demerit good
- external and/or social costs of tobacco consumption
- informational problem or long-run versus short-run private costs of consumption
- market failure and/or resource misallocation
- incentive function of prices
- the implications of inelastic demand
- government failure e.g. promotion of smuggling and 'black markets'
- the implications of an already high level of tobacco taxation
- the effect on jobs in the tobacco and/or retailing industries

USE THE LEVELS MARK SCHEME ON PAGES 7 & 8

MAXIMUM FOR PART (c) 15 MARKS