



ASSESSMENT and
QUALIFICATIONS
ALLIANCE

Mark scheme January 2003

GCE

Economics

Unit ECN1

Copyright © 2003 AQA and its licensors. All rights reserved.

The Assessment and Qualifications Alliance (AQA) is a company limited by guarantee registered in England and Wales 3644723 and a registered charity number 1073334
Registered address: Addleshaw Booth & Co., Sovereign House, PO Box 8, Sovereign Street, Leeds LS1 1HQ
Kathleen Tattersall: *Director General*

Unit 1: Markets and Market Failure**ECN1/1**

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

Key list

1.	D	14.	B
2.	B	15.	C
3.	C	16.	D
4.	C	17.	D
5.	D	18.	C
6.	D	19.	C
7.	C	20.	A
8.	A	21.	B
9.	C	22.	D
10.	B	23.	B
11.	D	24.	A
12.	A	25.	D
13.	A		

ECN1/2

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 at the end of this general introduction.
- (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 four Mark Band Descriptors or "Levels of Skill" included in the mark scheme. The Mark Band Descriptors are set out below. 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 also shown below. 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 are likely to be poor. There is little use of economic terminology. **0 to 5 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 will be some attempt to present alternative points of view. 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. **6 to 10 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. The candidate will present alternative points of view and there will be some attempt to evaluate the issues, arguments and/or data. 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. **11 to 15 marks**

Level 4

Two or more relevant issues are recognised. 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. **16 to 20 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: 35 marks**

1(a) **Extract A** shows changes in the world production of crude oil between 1997 and 2001. Describe the main changes that occurred over this period. *(5 marks)*

For candidates who:

identify the fact that total oil production was little changed over the period **1 mark**

back this up with statistics **1 mark**

calculate the overall change over the period **1 mark**

back this up with statistics **1 mark**

identify the overall change in OPEC production **1 mark**

back this up with statistics **1 mark**

identify the overall change in non-OPEC production **1 mark**

back this up with statistics **1 mark**

compare OPEC and non-OPEC production **1 mark**

back this up with statistics **1 mark**

identify a significant change in either OPEC or non-OPEC production within the data period **1 mark**

back this up with statistics **1 mark**

Maximum of 2 marks in total for identifying a significant change within the data period

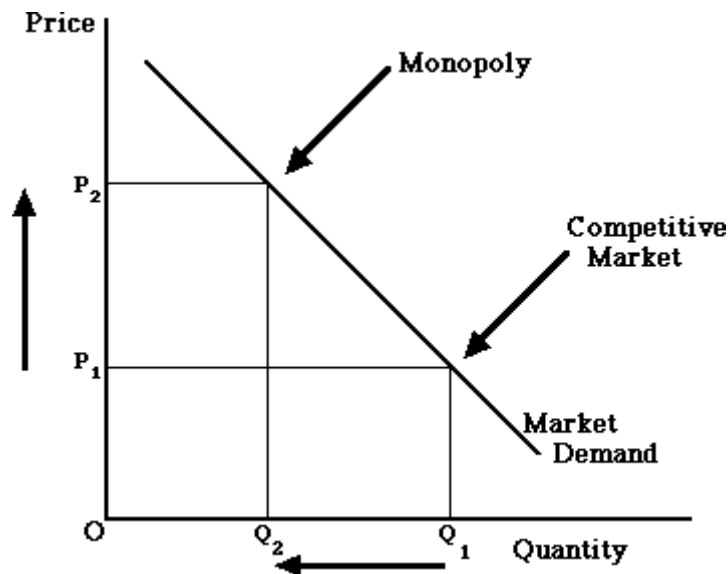
Maximum of 3 marks if no relevant use is made of the statistics

MAXIMUM FOR 1(a) = 5 MARKS

1 (b) (i) Using a demand curve diagram, explain how a monopoly may be able to raise the price of a good (**Extract B**, lines 5-6). (4 marks)

(ii) Using a supply and demand diagram, explain how "OPEC has tried to stabilise the price of crude oil between \$22 and \$28 a barrel" (**Extract B**, lines 8-9). (6 marks)

(i) The expected diagram will show a demand curve with two prices and levels of output: the higher output and the lower price for a competitive market and the lower level of output and higher price for monopoly. Reward any relevant and accurate diagram and/or explanation, including those going beyond the AS-Level specification.



For candidates who:

draw a relevant diagram

up to 2 marks

state that a monopoly might restrict output to raise price:

1 mark

make any other relevant point e.g. about entry barriers, how market power is exercised

1 mark per point

Maximum of 2 marks if there is no diagram or no written explanation

MAXIMUM FOR 1(b)(i) = 4 MARKS

(ii) For candidates who:

draw a supply and demand diagram to show an initial equilibrium in the oil market 1 mark

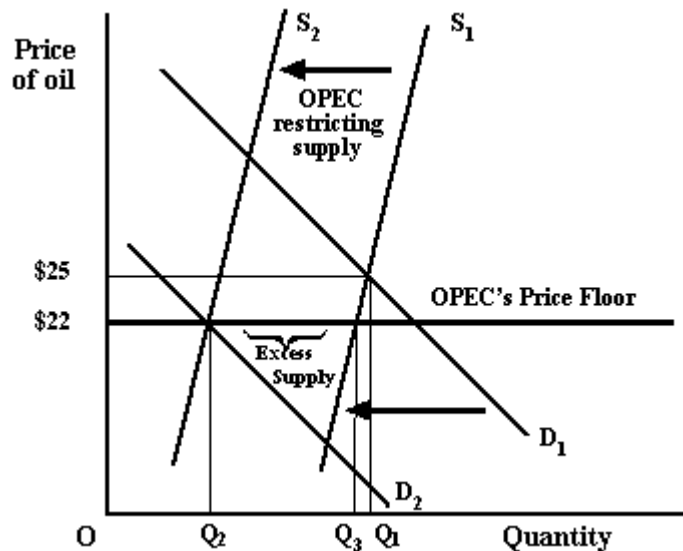
show the demand curve shifting leftward (or non-OPEC supply increasing), tending to cause the price to fall below \$22 a barrel 1 mark

show excess supply at \$22 a barrel 1 mark

show the supply curve shifted leftward 1 mark

explain how OPEC may affect supply to stabilise the price at \$22 a barrel up to 3 marks

for explaining how OPEC may prevent the price rising above \$28 a barrel up to 2 further marks



If the candidate devotes most of the answer to an explanation of stabilising the price at \$28 a barrel, marks should be awarded in a similar way to stabilisation at \$22 a barrel, with **up to 2 further marks** for relevant explanation of stabilisation at \$22 a barrel.

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

Maximum of 3 marks if there is no mention or illustration of the shift in supply

MAXIMUM FOR 1 (b)(ii) 6 = MARKS

1(c) **Extract C** states that motor vehicle fuel is heavily taxed, but aviation fuel is untaxed. Evaluate the economic case **for** and **against** the government imposing high tax rates on both motor vehicle fuel **and** aviation fuel. *(20 marks)*

The issues identified below are intended to provide an indication of some of the areas that might be discussed. Candidates can only be expected to consider a few of these issues in the time available. To earn more than 13 marks, there must be some evaluation, namely a conclusion as to whether a high tax rate should be imposed on both fuels, or on just one fuel, or on neither of the fuels. It does not matter which conclusion is reached, providing it is argued in a convincing way, though it is probable that better answers will argue that both fuels should be similarly taxed, and probably at quite a high rate. To reach Levels 3 and 4, both motor vehicle fuel taxation and aviation fuel taxation must be brought into the answer. Marginal analysis is **NOT** required for full marks, nor is explicit and/or developed analysis or evaluation in terms of allocative inefficiency, though candidates who do this will usually score highly.

Issues and areas for discussion include:

- Negative externalities (pollution and/or congestion) produced by motor vehicles
- Negative externalities (air and/or noise pollution) produced by aeroplanes
- Divergence between private and social costs
- Market failure
- The use of taxation to correct market failure or discourage production of externalities
- Alternatives to taxation e.g. regulation
- Signalling, incentive and rationing functions of prices
- Supply and demand diagrams illustrating the effect of a tax on fuel
- The effectiveness of a fuel tax and/or government failure replacing market failure
- Popular revolt against a tax
- Any similarities or differences between the cases for and against taxing aviation fuel and motor vehicle fuel

Use the levels mark scheme described earlier

MAXIMUM FOR 1 (c) = 20 MARKS

OR

2

Total for this question: 35 marks

2(a) Compare the changes in government expenditure on national defence and on police services which are shown in Extract D . <i>(5 marks)</i>
--

For candidates who:

identify the fact that expenditure on national defence fell as a percentage of national income/output over the period: **1 mark**

back this up with statistics: **1 mark**

identify the fact that expenditure on police services hardly changed as a percentage of national income/output over the period: **1 mark**

back this up with statistics: **1 mark**

note that expenditure on both defence and police were small percentages of national income/output: **1 mark**

back this up with statistics: **1 mark**

note that expenditure on defence was a larger proportion of national income/output: **1 mark**

make relevant comparisons: **up to 2 marks**

make any other relevant point e.g. note that the figures do not show absolute changes, note they refer to the UK for defence, but England & Wales for policing: **1 mark per point**
up to 2 marks in total

Maximum of 3 marks if no relevant use is made of the statistics

Maximum of 3 marks if no comparison is made

MAXIMUM FOR 2 (a) = 5 MARKS

2(b)(i) With the use of examples, explain the difference between a public good and a private good (Extract E , lines 1-2).	<i>(4 marks)</i>
(ii) Explain why "markets generally provide private goods" (Extract E , line 1).	<i>(6 marks)</i>

(i) For candidates who:

state that a public good is non-excludable or a private good is excludable:	1 mark
explain this (allow the free-rider idea):	1 mark
state that a public good is non-rival or a private good is rival (non-diminishable or non-exhaustible):	1 mark
explain this:	1 mark
provide one example of a public good:	1 mark
provide one example of a private good:	1 mark

Maximum of 2 marks if only public goods or private goods are defined/explained

Maximum of 3 marks if there is no example given

MAXIMUM FOR 2 (b) (i) = 4 MARKS

(ii) For candidates who:

make a basic statement that markets can provide private goods because of their characteristic of excludability:	1 mark
provide a developed explanation of this statement (e.g. ability to make a profit):	up to 2 further marks
make a basic statement that markets can provide private goods because of their characteristic of rivalry:	1 mark
provide a developed explanation of this statement e.g. there is no case for the state intervening to provide the goods free:	up to 2 further marks
explain why some private goods, e.g. merit and/or demerit goods may not be adequately provided by markets:	up to 2 marks
explain how a private good is provided in a market e.g. at an equilibrium price where supply = demand:	up to 2 marks

MAXIMUM FOR 2 (b) (ii) = 6 MARKS

2(c) Evaluate the economic case **for** and **against** the government providing public goods, such as national defence or policing. (20 marks)

The issues identified below are intended to provide an indication of some of the areas that might be discussed. Candidates can only be expected to consider a few of these issues in the time available. To earn more than 13 marks there must be some evaluation, namely a conclusion as to whether the case for is stronger than the case against, backed up by some reasoning and/or evidence. It does not matter whether the candidate argues that the case for or the case against is stronger, or writes an 'it all depends' conclusion, providing the conclusion is well argued. Answers will probably be stronger on the case for the government providing a public good than on the case against, but Extract F provides stimulus material for the latter (though the Extract is not sign-posted in the wording of the question). The words *such as* in the question are significant. They are likely to stimulate discussion of policing and/or defence, but discussion, analysis and evaluation of any recognised public good is equally valid.

Issues and areas for discussion include:

- Defence as a public good
- Police services as a public good
- Any other public good(s)
- Distinctions between pure and non-pure public goods
- Market failure and public goods
- The use of public policy to correct market failure associated with public goods
- The case for government provision
- The quality of public goods provided by the public sector
- The quality of public goods privately provided or provided by markets
- Possible government failure
- Opportunity cost of government provision

Use the levels mark scheme described earlier

MAXIMUM FOR 2 (c) = 20 MARKS