General Certificate of Education

Economics ECON1

Unit 1:   Markets and Market Failure

Mark Scheme

2009 examination - June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

June 2009   **ECON1**

Advance Subsidiary Economics Unit 1

Section A: Objective Test

June 2009

The following list indicates the correct answers used in marking the candidates' responses.

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

Advanced Subsidiary Economics

June 2009 **ECON1**

Mark Scheme

Section B: Data Response

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:

(i)   **An issue based approach.** The mark scheme for the first three elements of each data response question 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.

(ii)   **A levels approach.** This approach is used for marking the final element of each data response question. The Levels Mark Scheme on the next page identifies five levels representing differences in the quality of work. A range of marks is allocated at each level. First decide the level into which an answer falls. 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. Then think in terms of awarding the mid-point mark which has been identified for that level (e.g. 14 marks for Level 3). Move up and down from this notional mark by considering the extent to which the answer meets the level description overall. Strength in one skill can outweigh weakness in another. When using the Levels Mark Scheme the marker **must** identify where a particular skill is being demonstrated. The **key** to be used to identify the skill is given after the levels descriptions. The question-specific mark scheme summarises the information which could be used to answer the question, but without attaching marks to particular issues.

THE LEVELS MARK SCHEME FOR AS

Levels Descriptions

In the final element 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. An answer showing no evidence of evaluation, however good the analysis, should be awarded a maximum of 13 marks (in Level 3). The quality of the evaluation should be the sole distinction between a Level 4 and Level 5 answer. It is not necessary for the answer to identify a wide range of issues to score the top mark. As indicated below, the **Quality of Written Communication** used should be taken into account when awarding marks.

Level 1: A very weak answer
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. There might be some evidence of organisation in the answer but generally it 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 6 marks
Mid-Point 4 marks

Level 2: A poor answer but some understanding is shown
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 and analysis will therefore be very limited. There may be some attempt to present alternative points of view but any attempt at evaluation is limited or superficial. There is some logic and coherence in the organisation of the answer. 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.
7 to 11 marks
Mid-Point 9 marks

Level 3: An adequate answer with some correct analysis but very limited evaluation
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 and there is some evidence that the candidate can analyse issues. There will be some attempt to present alternative points of view 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.
12 to 16 marks
Mid-Point 14 marks

Level 4: Good analysis but limited evaluation
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 answer the question. Some appreciation of alternative points of view is shown. Satisfactory use is made of evidence and/or theoretical analysis to evaluate the issues/arguments/economic models 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
17 to 21 marks
Mid-Point 19 marks

Level 5: Good analysis and evaluation
Two or more relevant issues are identified. Good understanding of basic economic concepts and models is demonstrated. The candidate is able to apply these concepts and models to 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/economic models identified and to support conclusions. A clear final judgement is made. 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.
22 to 25 marks
Mid-Point 24 marks

THE KEY TO BE USED WHEN USING THE 'LEVELS' MARKING 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.

EITHER

Question 26   **Total for this question: 50 marks**

> **01** Define the term 'demerit good' (**Extract B**, line 2).   *(5 marks)*

There are two acceptable ways of defining a demerit good, first in terms of negative externalities generated in consumption and unwillingly received by third parties, and second in terms of informational problems associated with the long-term *private* costs of consumption exceeding the short-term *private* costs of consumption. Either definition accurately stated can earn all five marks. It is also possible to earn marks through the use of both approaches.

For an acceptable definition, eg:

(i)   a good which generates negative externalities when consumed
(ii) a good for which the socially-optimal level of consumption is less than the privately-optimal level of consumption
(iii) a good for which the social cost of consumption > private cost of consumption; (or when the social benefit of consumption < private benefit of consumption)

Alternative approach:

(iv) a good for which the long-term private costs of consumption exceed
      the short-term private costs of consumption

NB   Full marks should be awarded to a candidate who demonstrates a clear understanding of the term 'demerit good' even if the definition isn't exactly the same as the four acceptable definitions quoted above. Equally, if this is shown in a diagram, full marks should be awarded.   **5 marks**

If the definition is incomplete (or inaccurate), marks can be broken down, for example as follows:

Defining a demerit good as a good that the government or society deems to be bad
for the consumer: **2 marks**

Correct distinction between external and private costs (or social costs and private costs):**2 marks**

Correct distinction between short-term and long-term private costs: **2 marks**

Defining a demerit good as a good which generates negative externalities
(but with no mention that these are consumption externalities):   **2 marks**

Defining a demerit good as a good which is over-consumed/over-provided: **2 marks**

Providing an example: **2 marks**
(Two marks only for examples, including those mentioned in the text, however many are given)

                                        MAXIMUM FOR 01 = 5 MARKS

02 Using **Extract A**, identify **two** points of comparison between the prices charged for alcoholic drinks by different retail outlets in London in March 2008. *(8 marks)*

Award up to 4 marks each for each valid point made (two marks for identification and up to two marks for supporting references to the data). The valid points include:

- All three drinks were more expensive in public houses than in the other three retail outlets (see below)

- The price charged by the public house for beer was over twice the price charged by any of the other three retail outlets (£3.00 in a pub but £1.20 in other outlets)

- The price charged by the public house for a glass of wine was over twice the price charged by the two supermarkets but less than twice the price charged by the off-licence (£2.55 in a pub but £1.51-£1.27 in other outlets)

- The price charged by the public house for a measure of spirit was over five times the price charged by any of the other three retail outlets (£2.40 in a pub but £0.43-£0.47 in other outlets)

- The prices charged by the two supermarkets were the same (£1.20 and £1.27) for beer and wine but slightly different for a measure of spirit (Asda £0.43, Tesco £0.47)

- The prices of beer and wine charged by the off-licence were more expensive than the supermarket prices (beer £1.33 compared to £1.20; wine £1.51 compared to £1.27)

- The price charged for a measure of spirit by the off-licence lay between the prices charged by the two supermarkets (£0.45 between £0.43 and £0.47)

- comparison across products

Award only **1 mark** for each supporting reference to the data if there is no reference to the unit of measurement (£s).

A maximum of **2 marks** may be awarded if there is no comparison and a maximum of **4 marks** if there is no use of correct statistics or if a candidate confines the comparison to just one indicator.

If the candidate simply trawls through the data, award a maximum of **4 marks**.

A maximum of **6 marks** may be awarded where there is evidence of an overview being taken, even though parts of the answer give the impression of a trawl through the data.
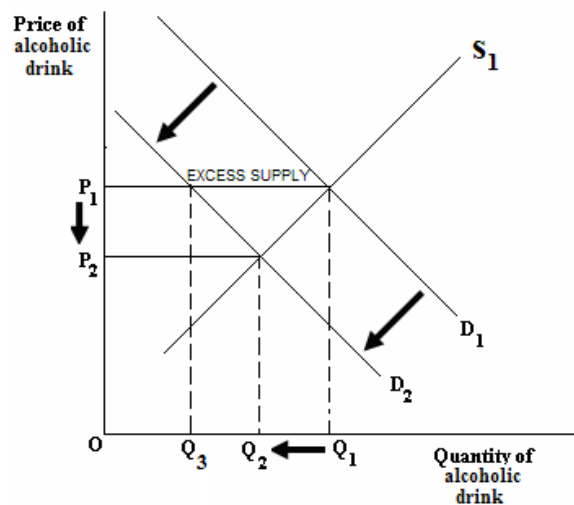
MAXIMUM FOR 02 = 8 MARKS

03   With the help of a demand and supply diagram, explain how an increase in the age limit to 21 might affect the market for alcoholic drinks.   *(12 marks)*

When awarding marks for the diagram, it is important to reward candidates who produce a valid response even if it is not the one which is shown below.

The anticipated response for the diagram:

An increase in the age limit to 21 reduces demand for alcoholic drink and hence the diagram should show a leftward shift of the demand curve, leading to a fall in the equilibrium output and price. The supply curve should slope upward, or possibly be vertical.

Breakdown of the marks for the diagram:

Axes labelled (price and quantity or P and Q will do)   **1 mark**

Original demand and supply curves correctly labelled   **1 mark**

Co-ordinates drawn in at the initial equilibrium and labels such as P_1 and Q_1 **1 mark**

Leftward shift of the demand curve   **2 marks**

Co-ordinates drawn in at the new equilibrium and labels such as P_2 and Q_2 **1 mark**

Any other relevant feature of the diagram (e.g. the amount of excess supply
at the original equilibrium)   **1 mark per feature up to a maximum of 2 marks**

Up to 6 marks for the diagram

The anticipated written response:

For candidates who

define demand, supply, a market, or any other relevant concept: **Up to 2 marks per definition**

Maximum of 2 marks for definitions

Explain why the raising of the age limit shifts the demand curve
leftward: **Up to 2 marks**

explain why the shift might not be very great, e.g. because
removing a 3 year age group has little effect on total demand: **Up to 4 marks**

explain the adjustment to the new equilibrium price,
in terms of the response to excess supply in the market: **Up to 4 marks**

For explaining any other relevant point, e.g. different effects on different sub-markets
such as bars and supermarkets, illegal under age drinking, impact of elasticities:
Up to 4 marks per point

Up to a MAXIMUM of 8 marks for a written explanation

MAXIMUM FOR 03 = 12 MARKS

> **04** Evaluate possible economic policies, **other than** increasing the age limit, that a government might use to reduce significantly the consumption of alcoholic drinks.
>
> *(25 marks)*

In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion, if they are to be awarded **more than 13 marks**.

Candidates who make a genuine attempt at evaluation should be well rewarded. *For this question they are likely to discuss the issue of whether different policies complement each other or are substitutes for each other; and what is a significant reduction in consumption; whether there is a need to reduce consumption for the whole population or just for some groups within the population. Candidates may also discuss the implications of the fact that alcohol is already more expensive in the UK than in many other similar countries; the issue of whether the problem results from culture rather than from price; implications resulting from the categorising of alcoholic drink as a demerit good which markets under-price; long-term versus short-term considerations; the issue of whether government economic policies (or intervention) can be successful; improving versus replacing the market.*

Issues and areas for discussion:

It is anticipated that candidates will draw on the ideas given in Extract B, which discusses taxation and regulation, and in Extract C which draws attention to a need for a change in behaviour. Other relevant policies, such as advertising the adverse effects of alcohol consumption and limiting the number of bars in town centres, and not mentioned in the Extracts. However, they are relevant for discussion.

- Consumption of alcohol as a cause of market failure;

- Alcohol as a demerit good;

- Regulation versus taxation;

- The importance of education and providing drinkers with accurate information;

- Applying the concept of elasticity;

- Government failure arguments;

- Economic policies, e.g. advertising, restriction of availability.

Also give credit for:

- Relevant use of data and/or candidate's knowledge;

- Relevant use of evidence;

- Relevant use of diagram(s)

- Overall assessment.

USE THE LEVELS MARK SCHEME ON PAGES 5 & 6

MAXIMUM FOR 04 = 25 MARKS

OR

Question 27   **Total for this question: 50 marks**

> **05**   Define the term 'negative externality' (**Extract E**, line 1).   *(5 marks)*

For an acceptable definition e.g.

    (i)   an adverse consequence of an economic activity that is experienced by third parties
    (ii)   an adverse spin-off effect resulting from an economic activity
    (iii) the effect produced when the social cost of an activity > private cost of the activity, (or when the social benefit of the activity < private benefit of the activity)
    (iv) the effect produced when the socially-optimal level of consumption or production > than the privately-optimal level of consumption
    (v)   the effect produced when social costs are greater than private costs
    (vi) an accurate definition of either a production externality, a consumption externality, or a mixed externality

NB   Full marks should be awarded to a candidate who demonstrates a clear understanding of the term 'negative externality' even if the definition isn't exactly the same as the six acceptable definitions quoted above. Equally, if this is shown in a diagram, full marks should be awarded.   **5 marks**

If the definition is incomplete (or inaccurate), marks can be broken down, for example as follows:

Stating that an externality is generated and received outside the market: **2 marks**

Correctly defining an externality without reference to the word *negative*:   **2 marks**

Solely defining a positive externality: **2 marks**

Defining a negative externality as a demerit good: **2 marks**

Providing an example: **2 marks**
(Two marks only for examples, including the example given in the text, however many are given. No marks for examples of positive externalities, unless for some recipients the externality could be positive, but for others, negative, e.g. loud music)

MAXIMUM FOR 05 = 5 MARKS

06	Compare **two** changes shown in **Extract D** in UK waste production and recycling over the period 1996 to 2006. *(8 marks)*

Award up to 4 marks each for each valid point made (two marks for identification and up to two marks for supporting references to the data). The valid points include:

- The total quantity of waste produced increased over the whole of the data period (from approx 450 kilos to approx. 485 kilos)

- The total quantity of waste produced increased in each year between 1996 and 2003 (from approx. 450 kilos to approx. 490 kilos)

- Though in some years the increase was very small (20 kilos in 1996)

- The total quantity of waste produced fell between 2003 and 2006, though in 2005 it rose slightly (overall from approx. 490 kilos to approx 485 kilos)

- The total quantity of un-recycled waste increased every year from 1996 to 2001 or 2002 (from approx. 420 kilos to approx. 430 kilos)

- The total quantity of un-recycled waste decreased every year from 2002 until 2006 (from approx. 420 kilos to 390 kilos)

- The total quantity of recycled waste increased every year from 1996 to 2006 (from approx. 30 kilos to approx. 150 kilos)

- Recycled waste grew as a proportion of the total in each year (from approx. 7% in 1996 to approx. 26% in 2006)

Award only **1 mark** for each supporting reference to the data if there is no reference to the unit of measurement (kilos).

A maximum of **2 marks** may be awarded if there is no comparison and a maximum of **4 marks** if there is no use of correct statistics or if a candidate confines the comparison to just one indicator.

If the candidate simply trawls through the data, award a maximum of **4 marks**.

A maximum of **6 marks** may be awarded where there is evidence of an overview being taken, even though parts of the answer give the impression of a trawl through the data.
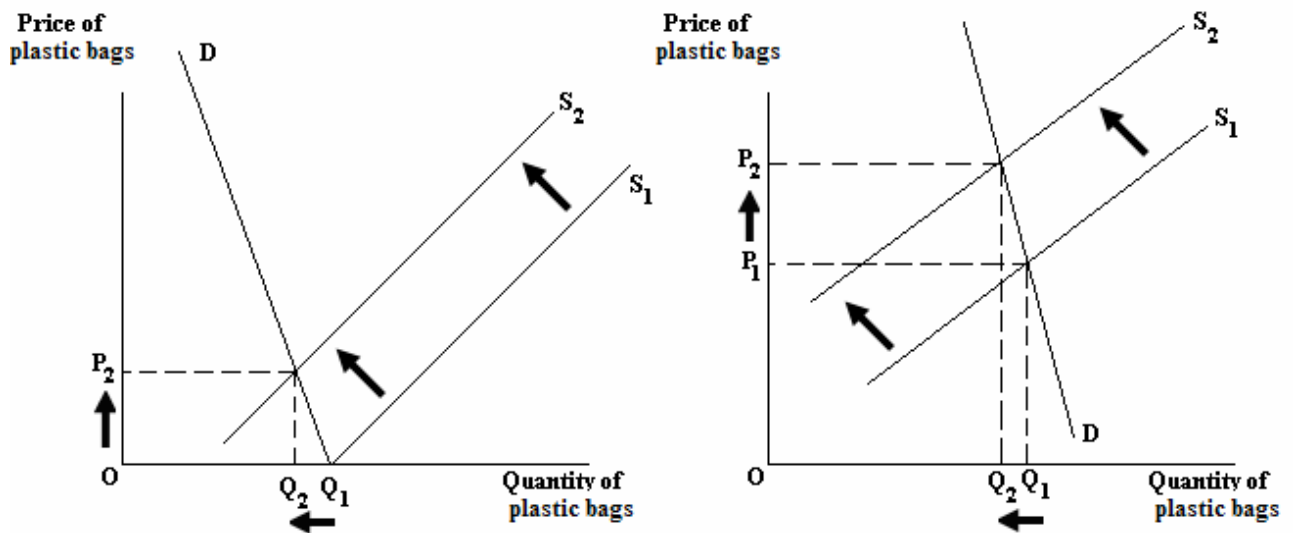
MAXIMUM FOR 06 = 8 MARKS

07	With the help of a demand and supply diagram, explain how a tax on the plastic bags distributed by shops and supermarkets might affect the use of plastic bags. *(12 marks)*

When awarding marks for the diagram, it is important to reward candidates who produce a valid response even if it is not the one of the two that are shown below.

The anticipated response for the diagram:

Two possible diagrams are shown below. In both cases the tax shifts the supply curve leftward or upward. The left-hand diagram assumes that plastic bags were given away free by supermarkets but that the tax leads to a price being charged for the bags. The right-hand diagram assumes that a price was already charged for plastic bags before the tax was imposed. Both diagrams illustrate a unit or specific tax on plastic bag. However a diagram showing an ad valorem tax is also possible.

Breakdown of the marks for the diagram:

Axes labelled (price and quantity or P and Q will do) **1 mark**

Original demand and supply curves correctly labelled **1 mark**

Co-ordinates drawn in at the initial equilibrium and labels such as P_1 and Q_1 **1 mark**

Leftward shift of the supply curve **2 marks**

Co-ordinates drawn in at the new equilibrium and labels such as P_2 and Q_2 **1 mark**

Any other relevant feature of the diagram (e.g. the amount of excess demand at the original equilibrium) **1 mark per feature up to a maximum of 2 marks**

Up to 6 marks for the diagram

The anticipated written response:

For candidates who:

define demand, supply, tax, or any other relevant concept: **Up to 2 marks per definition**

Maximum of 2 marks for definitions

explain why imposing the tax shifts the supply curve leftward: **Up to 2 marks**

explain why the shift might not be very great, e.g. because
the tax may be small: **Up to 4 marks**

explain the adjustment to the new equilibrium price,
in terms of the response to excess demand in the market: **Up to 4 marks**

explain any other relevant point, e.g. the willingness of supermarkets
to absorb all the tax; supermarkets selling 'bags for life to replace the use of plastic bags';
the growth of home delivery replacing shopping at stores: **Up to 4 marks per point**

Up to a MAXIMUM of 8 marks for a written explanation

MAXIMUM FOR 07 = 12 MARKS

08 Assess the view that the environmental problems caused by the disposal of rubbish can best be dealt with by market forces rather than by government intervention. *(25 marks)*

In this part of the question, candidates will need to demonstrate that they are able to evaluate issues and arguments to support a conclusion, if they are to be awarded **more than 13 marks**.

Candidates who make a genuine attempt at evaluation should be well rewarded. *For this question they are likely to discuss whether or not people rather than 'disposed of rubbish' are the cause of environmental problems. They may also discuss different methods of disposing of rubbish, who creates the problem, shops or consumers; methods of packaging, designing products that are too expensive to repair, short-run versus long-run considerations; the effects of unintended consequences. Candidates may also discuss the particular problems posed by disposing of plastic bags; whether government controls provide an effective solution; taxation/subsidy as alternatives to controls.*

Issues and areas for discussion:

It is anticipated that candidates will draw on the ideas given in Extract E, which mentions the Irish tax on plastic bags, and in Extract F which also mentions the use of the price mechanism.

- Identification of particular environmental problems, e.g. resource degradation (pollution) and resource depletion (using up scarce resources);

- A general understanding of the meaning of a free market, i.e. a competitive market;

- Understanding and application of the three functions of prices (signalling and rationing/allocative, as well as the incentive function);

- How people's economic behaviour responds to prices;

- Different methods of rubbish disposal;

- Different possible government controls;

- Regulation as a government control;

- Taxation and subsidy as alternatives to controls or regulation;

- How people's economic behaviour responds to government controls;

- Market failure and/or government failure.

Also give credit for:

- Relevant use of data and/or candidate's knowledge;

- Relevant use of evidence;

- Overall assessment.

USE THE LEVELS MARK SCHEME ON PAGES 5 & 6

MAXIMUM FOR 08 = 25 MARKS