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ASSESSMENT and QUALIFICATIONS ALLIANCE

General Certificate of Education

Economics

ECON1: Markets and Market Failure

Mark Scheme

2010 examination - January 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. Further copies of this Mark Scheme are available to download from the AQA Website: www.aqa.org.uk

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Dr Michael Cresswell Director General

January 2010 **ECON1**

Advance Subsidiary Economics Unit 1

Section A: Objective Test

January 2010

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

KEY LIST

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

Advanced Subsidiary Economics Unit 1

January 2010 **ECON1**

Section B: Data Response

Mark Scheme

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 parts (a), (b) and (c) 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.

(ii) **A levels approach.** This approach is used for marking part (d) of the data response questions. 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

Level Descriptions

In part (d) 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 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 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 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

Total for this question: 50 marks

26 (a) Define the term 'normal good' (**Extract B**, line 1). *(5 marks)*

For an acceptable definition, e.g.

(i) a good for which demand increases as income increases
(ii) a good for which demand falls as income falls
(iii) a good with a positive income elasticity of demand

NB Full marks should be awarded to a candidate who demonstrates a clear understanding of the term 'normal good' even if the definition is not exactly the same as the three 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:

Providing a numerical example of positive income elasticity of demand: **2 marks**

Comparing a positive income elasticity of demand of between zero and unity with a positive income elasticity of demand greater than unity: **2 marks**

Stating that a normal good is the opposite of an inferior good: **2 marks**

A good with a positive elasticity of demand (i.e. no mention of income): **2 marks**
(but no marks for a positive *price* or *cross price* elasticity of demand)

Providing an example of a normal good: **2 marks**
(to award the marks, look for a comparative example with an alleged Inferior good)

No marks for simply stating or defining income elasticity of demand.
The concept has to be linked to the concept of a normal good

Do not reward an answer that solely states that a normal good is a good that is normally consumed, a good with a downward-sloping price demand curve, or which confuses a normal good with normal profit.

This mark scheme does not allow examiners to award 1 mark for a point. Examiners must award either 0 or 2 for each point made by the candidate.

MAXIMUM FOR PART (a) 5 MARKS

26 (b) Using **Extract A**, identify **two** significant points of comparison between the world market shares of orange juice producers over the period shown. *(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:

- Over the whole period, Florida's market share fell 31.2% points whereas Brazil's market share rose 28.8% points, **or** fell by 52% and rose by 110%.
- Over the whole period, Florida's market share fell from 60% to 28.8%, whereas Brazil's market share rose from 26.2% to 55.0%.
- The percentage changes in market share in Florida and Brazil were greatest between the first two periods (24% points and 22.2% points) than between periods two and three (1.1% points and 1.6% points), or between period three and 2005 (6.7% points and 5.0% points).

Candidates may also compare, in a similar way, 'the rest of the world' with Florida and/or Brazil.

Only award **1 mark** rather than 2 marks for a supporting reference if the % signs are omitted.

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 PART (b) 8 MARKS

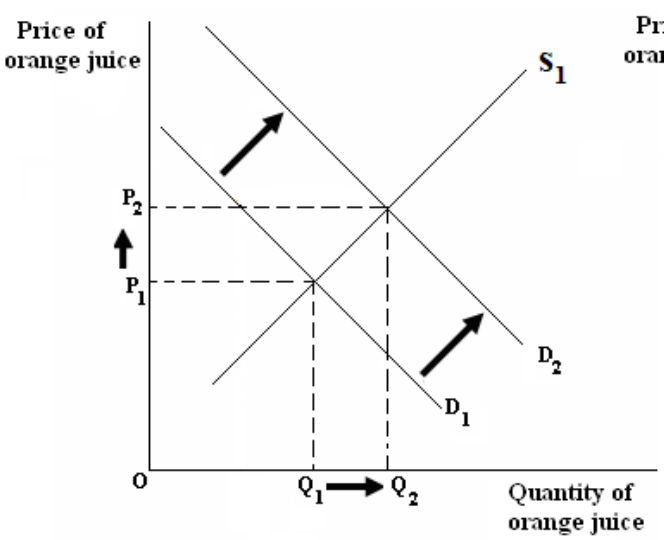
26 (c) With the help of a demand and supply diagram, explain why the price of orange juice rose in 2006. *(12 marks)*

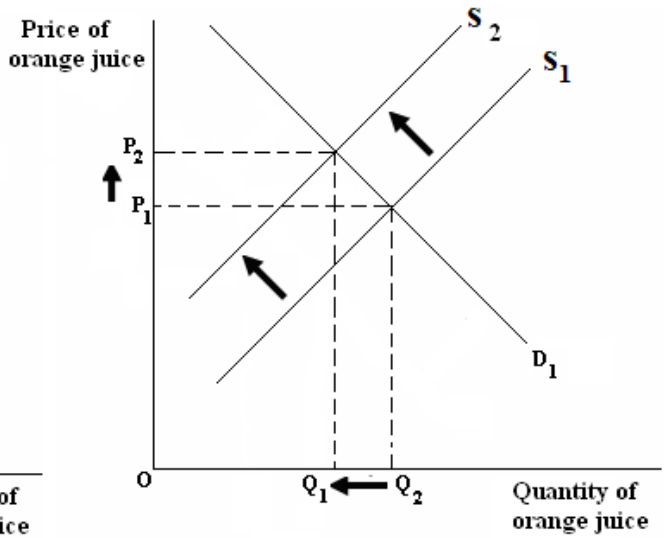
When awarding marks for the diagram, it is important to reward candidates who produce an economically valid response even if it is not one of the two that are shown below.

The anticipated response for the diagram:

Extract B mentions three factors that affect the positions of the demand and supply curves. These are:

- Global consumption increasing, possibly related to higher incomes via the normal good effect
- Speculative demand in response to hurricanes and dry weather shifting demand to the right
- Hurricanes and dry weather shifting the supply curve to the left





Breakdown of the marks for the left-hand 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**
Rightward 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 demand at the original equilibrium)	**1 mark per feature up to a maximum of 2 marks**

Breakdown of the marks for the right-hand 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**

Award marks as per the above for a combined diagram **Up to 6 marks for the diagram**

The anticipated written response:

For candidates who:

define demand and/or supply: **Up to 2 marks per definition**
Maximum of 2 marks for definitions

explain one of the causes of the rightward shift of the demand curve:
Up to 4 marks per cause

(e.g. identifying change of diet as a cause: **1 mark**; stating that incomes rise in developing countries: **1 mark**; drawing on the fact that orange juice is a normal good: **1 mark**; linking higher income to increased demand for orange juice: **1 mark**)

explain the cause of the leftward shift of the supply curve: **Up to 4 marks per cause**

(e.g. identifying bad weather as a cause: **1 mark**; stating that bad weather leads to lower agricultural yields: **1 mark**; which raises costs of production: **1 mark**; explaining that rising production costs shift the supply curve to the left: **1 mark**)

For explaining any other relevant point, e.g. how elasticity of supply may affect the outcome of a rightward shift of demand, e.g. why the emergence of excess demand results in a rising price: **Up to 4 marks per point**

Do not award marks for simply describing what the diagram shows, but award 2 marks for mentioning an increase of demand followed by an extension of supply (left-hand diagram) and 2 marks for mentioning a decrease of supply followed by a contraction of demand (right-hand diagram).

Up to a maximum of 8 marks for a written explanation

MAXIMUM FOR PART (c) 12 MARKS

26 (d) Using the data and your economic knowledge, evaluate the economic case **for** and **against** allowing market forces to determine food prices, without any intervention by governments. *(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**.

A maximum of **20 marks** should be awarded if there is no **explicit** reference to the data.

Candidates who make a genuine attempt at evaluation should be well rewarded.

Issues and areas for discussion:

Introductory:

- Definitions: markets, market forces;
- Describing different types of government intervention.

Developing the response to the question

Analysing:

- the roles of the various functions of prices in a competitive food market, signalling, creating incentives and rationing;
- the effect of hoarding and panic buying;
- the effect of different types of government intervention;
- the factors that have led to rising food prices;
- the effects of rising food prices on inequality.

Evaluation

Marks for evaluation might come from discussing the following:

- how changes in food prices affect market incentives and resource allocation;
- whether activities such as speculation and hoarding are part of the efficient functioning of markets, or whether they are a part of market failure;
- how price rises may be part of the rationing function of prices rather than evidence of market failure;
- the distributional consequences resulting from free market forces;
- the significance of the various factors that make up the cases for and against government intervention;
- the possible effects of different types of government intervention and the possibility of government failure;
- the extent to which unregulated market forces may lead to market failure;
- the roles of the various functions of prices in a competitive food market, signalling, creating incentives and rationing;
- the significance of the factors that have led to rising food prices;
- whether there is a role both for market forces and for some government intervention in the market

Other equally valid points may be discussed and should be given due credit

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 PART (d) 25 MARKS

OR

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

27 (a) Define the term 'social cost' (**Extract F**, line 3). *(5 marks)*

For candidates who

For an acceptable definition, e.g.:

(i) the whole of the cost resulting from any decision or choice, for example by a firm or by a consumer

(ii) the private cost plus external cost of any decision or action, for example by a firm or by a consumer

5 marks

If the definition is incomplete, marks may be broken down, for example as follows:

Defining a cost: **2 marks**

Defining an externality: **2 marks**

Understanding the difference between private and social, but without any reference to costs: **2 marks**

Providing an example, e.g. the social cost of motoring as the cost of fuel etc. plus the cost of pollution or congestion generated: **2 marks**
(No marks for providing an example of an externality on its own, without proper reference to social cost)

(Two marks only for examples, however many are given)

This mark scheme does not allow examiners to award 1 mark for a point. Examiners must award either 0 or 2 for each point made by the candidate.

MAXIMUM FOR PART (a) 5 MARKS

27 (b) Using **Extract D**, identify **two** significant points of comparison between changes in average UK rail fares and changes in the average price of consumer goods and services over the period shown. *(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:

- Both rail fares and the average price of consumer goods and services increased over the whole period. Rail fares increased from an index number of 100 to around 275; goods' prices from 100 to around 220
- The increase over the whole period was greatest for rail fares, 175% as against 120%
- From the beginning of 1991, the monthly rail fare index rose faster than the Consumer Prices Index, by about 145 index points compared to about 90 index points **or** the two data series diverged after 1990, e.g. there was about a 27 index point difference at the end of 1995, widening to about 52 index points at the end of the third quarter of 2008
- The two data series rose by similar amounts from 1987 to the beginning of 1991, from an index number of 100 to an index number of about 130
- The overall changes in both data series were not volatile, but it appears that until 2001, rail fares were increased just once at the beginning of the year, for example from the index of 150 at the end of 1993 to the index of about 162 in January 1994, but the prices of goods increased more continuously, for example, from the index of 152 to the index of 157 during 1997.
- There were some falls in rail fares from mid-2003 onward, for example from an index of about 225 to an index of about 221 late in 2003, compared to two small falls in the CPI, earlier in the period, for example from an index of about 174 to about 173 at the end of 2000

Allow a mark for an answer that states that the two data series show rail fares rose in real terms if this point is made in the absence of one of the two points of comparison

Only award 1 mark rather than 2 marks for a supporting reference if either 'index points', or 'index', or 'points' is/are omitted.

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.

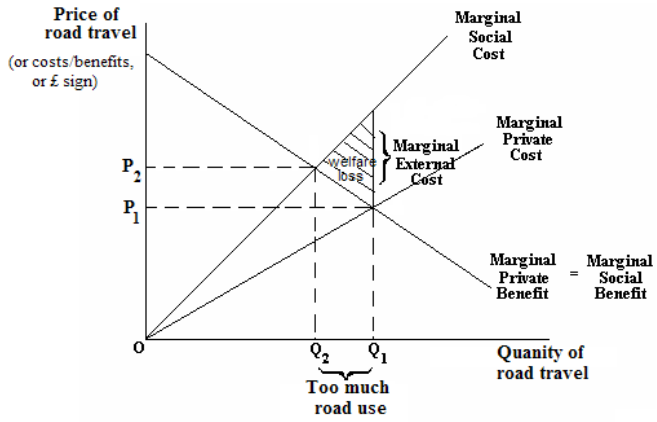
MAXIMUM FOR PART (b) 8 MARKS

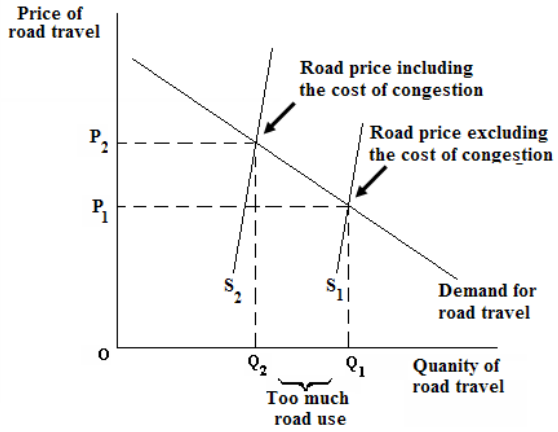
27 (c) With the help of an appropriate diagram, explain why 'too many people travel by road' (**Extract F**, lines 6-7). *(12 marks)*

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

The anticipated response for the diagram:

The expected diagram is one, such as the diagram below on the left, that shows road travel generating negative externalities. Alternatively, a diagram such as the one on the right may be used.





Breakdown of the marks for the left-hand diagram:

Axes labelled (price and quantity or P and Q will do;
(costs/benefits or the £ sign are acceptable on the vertical axis): **1 mark**

MPB = MSB curve (or demand curve) correctly labelled: **1 mark**
(also award the mark if the label is restricted to MSB or marginal benefit)

Co-ordinates drawn in for price and quantity, e.g. P_1 and Q_1: **1 mark**

MPC curve correctly labelled: **1 mark**

MSC curve correctly labelled: **1 mark**

Co-ordinates drawn for P_2 and Q_2: **1 mark**

Showing external cost : **1 mark**

Showing too much road use: **1 mark**

Any other relevant feature of the diagram, e.g. deadweight/welfare loss
1 mark per feature up to a maximum of 2 marks

Breakdown of the marks for the right-hand diagram:

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

Demand curve and supply curve (S_1) correctly labelled: **1 mark**

Co-ordinates drawn in for price and quantity, e.g. P_1 and Q_1: **1 mark**

Second supply curve (S_2) drawn to the left of S_1 and correctly labelled: **1 mark**

Co-ordinates drawn for P_2 and Q_2: **1 mark**

Showing external cost : **1 mark**

Showing too much road use: **1 mark**

Any other relevant feature of the diagram, e.g.excess demand at price P_1 following the shift of supply:

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 a relevant concept, e.g. MEC, MSC, demand, supply:

Up to 2 marks per definition

Maximum of 2 marks for definitions

explain why motorists only consider private costs and ignore the external costs they impose on other road users such as the cost of congestion: **Up to 4 marks**

(e.g. identifying a relevant private cost: **1 mark**; identifying a relevant external cost: **1 mark**; explaining why the external cost can be ignored: **2 marks**)

explain why there is overuse of roads: **Up to 4 marks**

(e.g. use of relevant marginalist analysis: **2 marks**; explanation of why the price being too low leads to overuse of roads: **2 marks**)

explain any other relevant point, e.g. the nature of the prices road users pay, deadweight or welfare losses: **Up to 4 marks per point**

Do not award marks for simply describing what the diagram shows, but award 2 marks for mentioning a decrease of supply followed by a contraction of demand in the right-hand diagram.

Up to a maximum of 8 marks for a written explanation

MAXIMUM FOR PART (c) 12 MARKS

27 (d) Using the data and your economic knowledge, evaluate the economic case **for** and **against** governments subsidising rail fares. *(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**.

A maximum of **20 marks** should be awarded if there is no **explicit** reference to the data.

Candidates who make a genuine attempt at evaluation should be well rewarded. Full marks can be earned without a mention of allocative efficiency or inefficiency. This concept is not in the AS specification

Issues and areas for discussion:

Introductory:

- Definitions: subsidy or subsidising;
- The meaning of resource allocation and misallocation
- The differences between private, external and social costs.

Developing the response to the question

Analysing:

- how a subsidy shifts the supply curve;
- how a subsidy affects the functions of prices, signalling, creating incentives and rationing;
- the effect of a subsidy in terms of the various elasticities of demand and supply;
- the effect of a subsidy on consumers;
- the effect of a subsidy on substitute forms of transport, especially road use;
- the opportunity cost of subsidies;
- why motorists, but not rail users, may generate congestion costs;
- the burden on taxpayers, or all tax payers pay but not all benefit.

Evaluation

Marks for evaluation might come from discussing the following:

- the implications of the assertion in Extract F that rail users pay for all the costs that rail use generates, but road users don't;
- the significance of the costs generated by road and rail use;
- the argument that if rail fares are subsidised, the prices of both road and rail may become too low compared to other prices in the economy;
- the extent to which resource misallocation is corrected if rail fares are subsidised;
- the significance of the various factors that make up the cases for and against a subsidy;
- a subsidy in relation to alternative forms of government intervention, e.g. measures to discourage road use;
- unintended consequences brought about by the subsidy;
- the opportunity cost of the subsidy;

- the significance of pollution as well as the congestion mentioned in Extract F;
- the significance of market failure versus government failure arguments.

Other equally valid points may be discussed and should be given due credit.

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 PART (d) 25 MARKS