Version 1

General Certificate of Education (A-level)
January 2012

Economics ECON1

(Specification 2140)

Unit 1: Markets and Market Failure

Final

Mark Scheme

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 events which all examiners participate in and is the scheme which was used by them in this examination. The standardisation process 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 standardisation each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, examiners encounter unusual answers which have not been raised 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.

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Advance Subsidiary Economics Unit 1

January 2012 **ECON1/1**

Section A: Objective Test (ECON1/1)

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

Key List

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

Advance Subsidiary Economics

January 2012 **ECON1/2**

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 questions **01**, **02**, **03**, **05**, **06** and **07** of the context 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 questions **04** and **08** of the context questions. The Levels of Response 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 (eg 13 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.

LEVES OF RESPONSE MARK SCHEME: QUESTIONS 04 AND 08 ONLY

AS **LEVELS OF RESPONSE**	**AO1** **KNOWLEDGE and UNDERSTANDING of theories, concepts and terminology**	**AO2** **APPLICATION of theories, concepts and terminology**	**AO3** **ANALYSIS of economic problems and issues**	**AO4** **EVALUATION of economic arguments and evidence, making informed judgements**
Level 5 22-25 marks (mid-point 24) **Good analysis and good evaluation**	Good throughout the answer with few errors and weaknesses	Good application to issues Good use of data to support answer	Relevant and precise with a clear and logical chain of reasoning	Good with a clear final judgement
Level 4 17-21 marks (mid-point 19) **Good analysis but limited evaluation** **OR** **Reasonable analysis and reasonable evaluation**	Good throughout the answer with few errors and weaknesses Good throughout much of the answer with few errors and weaknesses	Good application to issues Good use of data to support answer Some good application to issues. Some good use of data to support answer	Relevant and precise with a clear and logical chain of reasoning Largely relevant and well organised with reasonable logic and coherence	Limited but showing some appreciation of alternative points of view Reasonable, showing an appreciation of alternative points of view
Level 3 10-16 marks (mid-point 13) **Reasonable answer, including some correct analysis but very limited evaluation**	Satisfactory but some weaknesses shown	Reasonable application to issues Reasonable use of data to support answer	Reasonably clear but may not be fully developed and is perhaps confused in places with a few errors present	Superficial, perhaps with some attempt to consider both sides of the issue(s)
Level 2 4-9 marks (mid-point 7) **Weak with some understanding**	Limited and some errors are made	Partial application to issues with some errors Limited use of data to support answer	Partial but confused at times, lacking focus and development Limited logic and coherence	A very basic and simplistic attempt is made which is unsupported by analysis
Level 1 0-3 marks (mid-point 2) **Very weak**	Weak with a number of errors	Little, if any, application to issues No use of data to support answer	Poor and lacking clarity and focus	No relevant evaluation

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 student to answer the question properly.

I where a relevant **ISSUE** is raised by the student.

K Where the student demonstrates **KNOWLEDGE** of recent developments or features of the economy which help enhance the student's response to the question. This should also be used where the student quotes relevant examples.

Ap Where the student demonstrates the ability to **APPLY** knowledge and **CRITICAL UNDERSTANDING** to problems and issues.

An Where the student demonstrates the ability to **ANALYSE** the problem using appropriate economic ideas.

E Where the student **EVALUATES** and makes judgements about the significance of various issues and arguments.

QUALITY OF WRITTEN COMMUNICATION

Quality of Written Communication (QWC) will be assessed in Questions 04 and 08 only.

Students will be assessed according to their ability to:

- ensure that text is legible, and that spelling, grammar and punctuation are accurate, so that meaning is clear
- select and use a form and style of writing appropriate to purpose and complex subject matter
- organise information clearly and coherently, using specialist vocabulary when appropriate.

No specific marks are awarded for QWC.

However, examiners should take into account QWC when determining the mark to be awarded for an answer. This means an answer could be taken either up (for exceptional QWC) or down (for very poor QWC) by 1 mark (and no more).

EITHER

Context 1 **Total for this Context: 50 marks**

01	Define the term 'composite demand' (**Extract B**, line 9).	*(5 marks)*

For an acceptable definition, eg demand for a good that has multiple or at least two uses; where the product is required for more than one use; an increase in demand for one use will lead to a decrease in supply of the good for another	**5 marks**
Full marks should be awarded to a candidate who demonstrates a clear understanding of the term 'composite demand' even if the definition is not exactly the same as the acceptable examples quoted above.	

If the definition is inaccurate or incomplete, maximum of 4 marks which may be broken down, for example as follows:

Definition of demand	**2 marks**
For an accurate relevant diagram(s) illustrating a change in demand for the good for one use and an opposite shift in supply of the good for another use	**2 marks**
An example of composite demand from Extract B, eg wheat for at least two of food, biofuel and livestock feed. **or** An example not in the Extracts, eg wheat for bread and cakes, oil for petrol and plastics **Reward only one example.**	**1 mark**

No marks should be awarded for an answer which confuses composite demand with demand for complementary goods or with derived demand.

Maximum of 4 marks if definition is incomplete or inaccurate

MAXIMUM FOR PART 01: 5 MARKS

02 Using **Extract A**, identify **two** significant points of comparison between changes in the world price of wheat and changes in world stocks of wheat over the period shown. *(8 marks)*

Award up to 4 marks each for <u>each</u> significant point made:

Identifies a significant point of comparison. Makes accurate use of the data to support the point of comparison. Unit of measurement given accurately.	**4 marks**
Identifies a significant point of comparison. Makes use of the data to support the point of comparison. However, only one piece of data is given when two are needed to make a valid comparison **and/or** no unit of measurement is given **and/or** the unit of measurement is used/applied inaccurately.	**3 marks**
Identifies a significant point of comparison. No use of correct data to support the comparison identified.	**2 marks**
Identifies a significant feature of the data but no comparison is made. Makes use of the data to support the feature identified. Unit of measurement given accurately.	**1 mark**

If a candidate identifies more than two significant points of comparison, reward the best two ('significant' such as highest/lowest, major changes/trends over a period of time).

The significant points of comparison include:

- There is a generally inverse relationship between the two variables. For example, from 2002 to 2008 wheat stocks fell from approximately 240 million tonnes to about 140 million tonnes, while the price of wheat rose from around $3 a bushel to just over $12 a bushel.
- Over the whole period covered by the data, the price of wheat rose from around $3 a bushel to around $7 a bushel, compared to a fall in wheat stocks from 240 million tonnes to just under $200 million tonnes.
- The price of wheat was at its highest in beginning of 2008 at just over $12 a bushel, whereas wheat stocks were at their highest at 240 million tonnes in 2002.
- The price of wheat was at its lowest in the beginning of January 2002 at around $3 a bushel (or the end of 2004) whereas wheat stocks were at their lowest at around 140 million tonnes in 2008.
- Throughout the period, both the price of wheat in $ per bushel and the stocks of wheat in millions of tonnes fluctuated. The price of wheat had a range of approximately $3 per bushel to just over $12 per bushel, whilst stocks had a range of 240 million tonnes to 140 million tonnes.

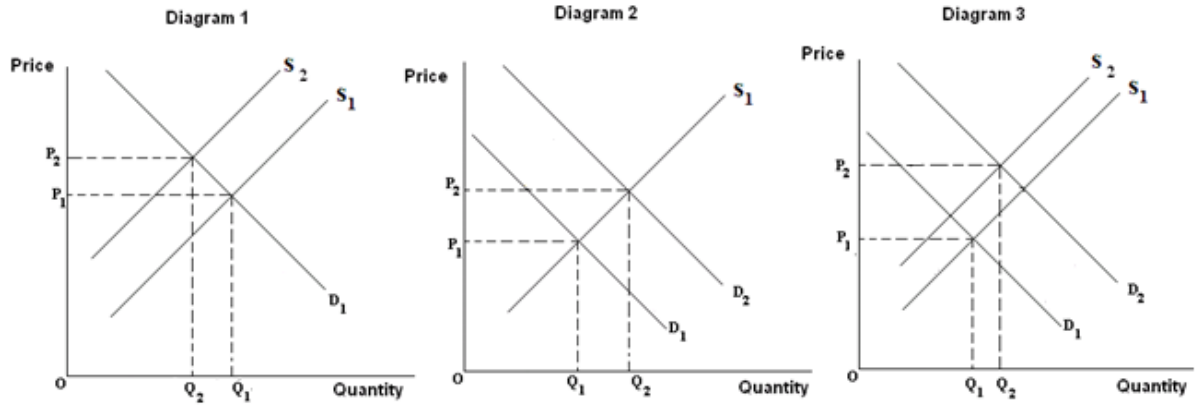
Allow a margin of error of +/- 10 million when judging wheat stocks

Allow a margin of error of +/- $1 when judging price per bushel

MAXIMUM FOR PART 02: 8 MARKS

03	With the help of an appropriate diagram and the information in **Extract B**, explain why the world price of wheat changed in 2010. *(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 three shown below for the global market for wheat.



The anticipated response for the diagram:

Three relevant diagrams are:

The anticipated response for Diagram 1 showing a leftward shift of supply:

Breakdown of the marks for the diagram:

For labelling all the axes, original supply and demand curves, and co-ordinates drawn in at the initial equilibrium and labels such as P_1 and Q_1.	**1 mark**
An accurately-drawn shift of the supply curve to the left.	**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 (eg the amount of excess demand at the original equilibrium).	**1 mark per feature up to a maximum of 2 marks**

The anticipated response for Diagram 2 showing a rightward shift of demand:

Breakdown of the marks for the diagram:

For labelling both axes, original supply and demand curves, and co-ordinates drawn in at the initial equilibrium and labels such as P_1 and Q_1	**1 mark only**
An accurately-drawn shift of the demand curve to the right.	**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 (eg the amount of excess demand at the original equilibrium).	**1 mark per feature up to a maximum of 2 marks**

The anticipated response for Diagram 3 showing a leftward shift of supply and a rightward shift of demand:

Breakdown of the marks for the diagram:

For labelling both axes, original supply and demand curves, and co-ordinates drawn in at the initial equilibrium and labels such as P_1 and Q_1.	**1 mark only**
An accurately-drawn shift of the demand curve.	**2 marks**
An accurately-drawn shift of the supply curve.	**2 marks**
Co-ordinates drawn in at the new combined equilibrium and labels such as P_2 and Q_2.	**1 mark**
Any other relevant feature of the diagram (eg the amount of excess demand at the original equilibrium).	**1 mark per feature up to a maximum of 2 marks**

Note: if in Diagram 3 the supply curve shifts by more than the demand curve, the new equilibrium would depict a fall in the equilibrium quantity of wheat. This is a valid response.

Up to a MAXIMUM of 4 marks for diagram(s)

Note:

(i) To earn the first mark in the grids, all the three listed tasks must have been attempted and been completed

(ii) For the task of labelling axes, price and quantity, P and Q, a monetary value such as the £ sign on the vertical axis and physical units of measurement such as tonnes of wheat are all valid, though the labels 'output' and 'price 'level' are not valid.

The anticipated written response:

Extract B mentions two sets of factors that affected the price of wheat in 2010. These were:

- supply-side factors: the Russian ban on exports; very dry weather; fires
- demand-side factors: increasing demand from emerging-market countries and rising living standards in poor countries; demand for wheat as an animal feed; the growth of demand for use as a bio-fuel; growth in the speculative demand for wheat.

Define demand, supply, excess demand, excess supply or any other relevant term Do **not** reward a definition of 'composite demand' (question 01)	**Up to 1 mark per definition Maximum of 2 marks for definitions**
For each of the following explanations, award 2 marks for each logical link in the chain of reasoning. **Award 'this causes the price of wheat to rise' only once.**	
Russia bans wheat exports **(2 marks)** causing the supply curve of wheat to fall in wheat-importing countries **(2 marks)** *and the price of wheat to rise* **(2 marks)**.	**Up to 6 marks**
Natural events (floods, droughts) **(2 marks)** reduce the supply of wheat **(2 marks)** *and the price of wheat to rise* **(2 marks)**.	**Up to 6 marks**
Rising living standards in poor countries increase the demand for meat **(2 marks)** causing the demand for wheat as animal feed to rise **(2 marks)** *and the price of wheat to rise* **(2 marks)**.	**Up to 6 marks**
Increased demand for biofuel **(2 marks)** increases the demand for wheat **(2 marks)** *and the price of wheat to rise* **(2 marks)**.	**Up to 6 marks**
Award 2 marks also for any of the following points in a logical chain of reasoning	
An explanation relating to the adjustment process: explaining excess demand resulting from an increase in demand (or from a decrease in supply) **(2 marks)** leading to the price of wheat rising **(2 marks)** followed by an extension of supply (or a contraction of demand) **(2 marks)**	**Up to 6 marks**
An explanation relating to price elasticity of supply/price elasticity of demand	**Up to 6 marks**

Note: Do not award marks for simply describing what a diagram shows.

Up to a MAXIMUM of 10 marks for a written explanation

MAXIMUM FOR PART 03: 12 MARKS

04 Using the data and your economic knowledge, evaluate different ways in which the government of a country which imports large quantities of wheat can try to stabilise wheat prices within the country. *(25 marks)*

Level 5	**Good analysis <u>and</u> evaluation**	**22 to 25 marks (Mid-Point 24 marks)**
Level 4	**Good analysis <u>but</u> limited evaluation** **OR** **Reasonable analysis <u>and</u> reasonable evaluation**	**17 to 21 marks (Mid-Point 19 marks)**
Level 3	**Reasonable answer, including some correct analysis <u>but</u> very limited evaluation**	**10 to 16 marks (Mid-Point 13 marks)**
Level 2	**Weak with some understanding**	**4 to 9 marks (Mid-Point 7 marks)**
Level 1	**A very weak answer**	**0 to 3 marks (Mid-Point 2 marks)**

For this question, an answer should be limited to a maximum of 13 marks if there is no evidence of evaluation.

A maximum of 21 marks may be awarded if there is no explicit reference to the data.

An answer which does not demonstrate at least <u>some</u> awareness that the question relates to a wheat-importing country should be limited to 21 marks (top Level 4).

Extract C provides a number of prompts about methods (ways) of government intervention, whereas **Extract B** discusses the causes of price instability which the intervention might try to address. It is expected that candidates will make use of this material when developing their answers.

Issues and areas for discussion include:

Introduction	• explaining the meaning of stable prices • identifying different relevant stabilisation policies: buffer stock intervention, granting subsidies, imposing price ceilings, encouraging domestic production.
Developing the response to the question: **Application**	• drawing on the prompts provided in Extract B which suggest why the price of wheat is unstable • drawing on the prompts provided in Extract C which suggest how the market mechanism responds to shortages, increases supply, and thereby stabilises the price of wheat • drawing on the prompt in Extract C about production lags • drawing on the prompts provided in Extract C which suggest how government intervention may be needed because of the breakdown in the signalling function of prices.

Developing the response to the question: **Analysis**	• developing a chain of reasoning to explain why the price of wheat is unstable • developing a chain of reasoning to explain how instability can best be dealt with by the market • developing chains of reasoning to explain how particular methods of intervention might reduce price instability • an analysis of particular methods of intervention specifically for wheat-importing countries • using relevant diagrams for, eg, buffer stocks; price controls; subsidies • analysis of the evidence in the extracts
Evaluation	• questioning the assumptions made when developing the chains of reasoning outlined above • contrasting the advantages and disadvantages of interventionist and non-interventionist policies (or ways of intervention) • discussing whether and to what extent one or more of the analysed policies/ways will be successful. (Relevant discussion of import controls should be rewarded though not expected) • discussing whether some but not other policies/ways (eg buffer stock intervention) may be successful. • discussing whether or not the instability can be dealt with by the market • discussing the limitations of particular methods of intervention specifically for wheat-importing countries, eg buffer-stock scheme intervention • discussion of government failure

Examiners should note that credit can be given for basic evaluation if a candidate simply identifies some of the arguments for and against particular relevant ways in which a government of a wheat-importing country can try to stabilise wheat prices within the country. Basic evaluation (and good analysis) would allow the answer to achieve a low Level 4. Stronger evaluation is provided by candidates who are able to support arguments both for and against the different ways, although answers cannot get above 21 marks unless they demonstrate at least <u>some</u> awareness that the question relates to a wheat-importing country. The question refers to 'different ways' in the plural. Two ways analysed and evaluated in depth can reach the higher levels in the mark scheme; likewise three or more analysed and evaluated in rather less depth.

USE THE DETAILED LEVELS MARK SCHEME ON PAGES 5 & 6 FOR FURTHER CLARIFICATION

MAXIMUM FOR PART 04: 25 MARKS

OR

Context 2 **Total for this Context: 50 marks**

05	Define the term 'external cost' (**Extract E**, line 11).	*(5 marks)*

For an acceptable definition (eg cost received by a third party; adverse spin-off effect; (marginal) social cost greater than (marginal) private cost).	**5 marks**
Also, award 5 marks for an acceptable definition of a pure consumption external cost, a pure production external cost, or a mixed consumption/production external cost.	
Full marks should be awarded to a candidate who demonstrates a clear understanding of the term 'external cost' even if the definition is not exactly the same as the acceptable examples quoted above.	

If the definition is inaccurate or incomplete, maximum of 4 marks which may be broken down, for example as follows:

Accurate definition of an externality, without any reference to external costs.	**2 marks**
Defining an external cost as a negative externality.	**1 mark**
An example of external cost from Extract E, eg accidents; cost of police time **or** An example not in the extract, eg pollution; congestion **Allow only one example**.	**1 mark**
For an accurate relevant diagram.	**2 marks**

Maximum of 4 marks if definition is incomplete or inaccurate

Do not award marks for an answer which defines an external cost as a cost to society as a whole.

MAXIMUM FOR PART 05: 5 MARKS

06 **Extract D** shows differences in some of the costs and benefits between speed cameras and traffic-light cameras.

Identify **two** significant points of comparison between the costs and the benefits of the two types of road safety camera. *(8 marks)*

Award up to 4 marks each for <u>each</u> significant point of comparison made:

Identifies a significant point of comparison. Makes accurate use of the data to support the point of comparison. Unit of measurement given accurately.	**4 marks**
Identifies a significant point of comparison. Makes use of the data to support the point of comparison. However, only one piece of data is given when two are needed to make a valid comparison **and/or** no unit of measurement is given **and/or** the unit of measurement is used/applied inaccurately.	**3 marks**
Identifies a significant point of comparison. No use of correct data to support the comparison identified.	**2 marks**
Identifies a significant feature of the data but no comparison is made Makes use of the data to support the feature identified Unit of measurement given accurately	**1 mark**

If a candidate identifies more than two significant points of comparison, reward the best two.

The significant points of comparison include:

- The cost of operating of speed cameras at £8 859 000 is higher than the cost of £3 541 000 for traffic-light cameras (alternatively £21093 per speed camera site compared to £14693 per traffic light camera site).
- The fine income generated by speed cameras at £6 730 000 is higher than the income of £1 632 000 generated by traffic-light cameras (alternatively, £16024 per speed camera site compared to £6772 per traffic light camera site).
- The value of accident reduction of speed cameras at £30 239 000 is higher than the value of accident reduction of traffic-light cameras at £6 663 000 (alternatively, £71998 per speed camera site compared to £27647 per traffic light camera site).
- At £6 730 000, the annual fine income generated by speed cameras is about 0.76 of the costs of operating the speed cameras (£8 859 000), compared to the fine income of £1 632 000 for traffic-light cameras, which is about 0.46 of the costs of operating the traffic light cameras (£3 541 000).
- The ratio of benefits of accident reduction with speed cameras at £30 239 000 to operating costs at £8 859 000 (a ratio of 3.41) is higher than the ratio of accident benefits with traffic light cameras at £6 663 000 to £3 541 000 (a ratio of 1.88).

MAXIMUM FOR PART 06: 8 MARKS

07 '….a speed camera is a merit good' (**Extract E**, line 9).

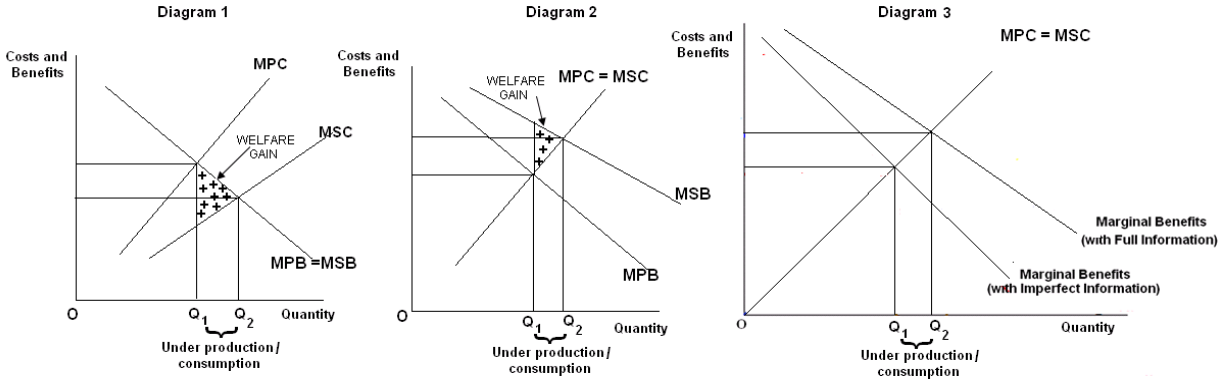
With the help of an appropriate diagram, explain why merit goods are often underprovided. *(12 marks)*

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

Diagram 1 represents the positive external benefit of production as a negative external cost.

Diagram 2 assumes that consumption of a merit good generates positive consumption externalities that benefit motorists. Because a free market fails to take account of the positive externalities, under-consumption and thence also under-production occurs.

Diagram 3 relates to the alternative way of defining a merit good in terms of imperfect information**, which alternatively could be drawn as a demand and supply diagram when, following receipt of the full information, consumption is higher**.



Breakdown of the marks for the diagram:

For labelling all the axes, the private cost and benefit curves, and the horizontal coordinate, labelled for example Q_1, to show the level of provision of a merit good before externalities or the lack of perfect information are taken into account.	**1 mark only**
For depicting social cost relative to private cost accurately on the diagram.	**1 mark**
For depicting social benefit relative to private benefit accurately on the diagram.	**1 mark**
Coordinate accurately drawn after taking account of the externalities or lack of perfect information.	**1 mark**
Any other relevant feature of the diagram, eg marginal external benefit shown or welfare gain shown; under-production correctly labelled.	**1 mark per feature up to a maximum of 2 marks**

Note: **(i)** **To earn the first mark in the grids, all the three listed tasks must have been attempted and been completed**.

(ii) **For the task of labelling axes, costs and benefits, c/b and/or price or a monetary symbol such as the £ sign on the vertical axis and quantity, output, or units of a good such as speed cameras are all valid**.

(iii) **Although Diagram 1 shows an external benefit of production rather than consumption, it should still be given credit.**

Candidates who draw a diagram which is inconsistent with their written explanation can only be awarded 1 mark for axes, cost and benefit (supply and demand) curves and initial equilibrium.

Up to a MAXIMUM of 4 marks for the diagram

The anticipated written response:

Define a relevant concept such as a merit good, marginal private, external and social costs and benefits, an information gap. Do not reward a definition of 'external cost' (question 05) but allow MARGINAL external cost.	**Up to 1 mark per definition Maximum of 2 marks for definitions**
Example of a merit good other than speed camera (one only).	**1 mark**
Example of a positive externality	**1 mark**
For the explanation, award 2 marks for each logical link in the chain of reasoning, for example:	
Merit goods are often underprovided because consumers only consider the private benefits (**2 marks**) so the positive (consumption) externalities are not taken into account (**2 marks**) so the MPB is less than the MSB (**2 marks**) the level of consumption ends up below the socially optimum level (**2 marks**) and there is a deadweight loss of social welfare (**2 marks**)	**Up to 10 marks**
Consumers only consider the short term benefits (**2 marks**) because they possess imperfect information (**2 marks**) they do not fully consider the long-term benefits of eg driving safely (**2 marks**) so consumption occurs at the privately optimum level rather than the socially optimum level (**2 marks**) and there is a misallocation of resources (**2 marks**)	**Up to 10 marks**
Instead of/in addition to the above, other relevant links include: • A market produces where MPB = MPC • The market does not produce where MSB = MSC • Consumers possess imperfect information of private costs and private benefits and/or long-term private costs and benefits	**Up to 10 marks per explanation**

• Less is consumed than if perfect information existed • The social benefits outweigh the private benefits • The MPC is greater than the MSC • Positive external benefit of production exists • A negative external cost exists	

Note: Do not award marks for simply describing what a diagram shows.

Up to a MAXIMUM of 10 marks for a written explanation

MAXIMUM FOR PART 07: 12 MARKS

08 '. . . the provision of speed cameras is a source of government failure' (**Extract E**, line 20).

Using the data and your economic knowledge, evaluate this view. *(25 marks)*

Level 5	**Good analysis and good evaluation**	**22 to 25 marks (Mid-Point 24 marks)**
Level 4	**Good analysis but limited evaluation** **OR** **Reasonable analysis and reasonable evaluation**	**17 to 21 marks (Mid-Point 19 marks)**
Level 3	**Reasonable answer, including some correct analysis but very limited evaluation**	**10 to 16 marks (Mid-Point 13 marks)**
Level 2	**Weak with some understanding**	**4 to 9 marks (Mid-Point 7 marks)**
Level 1	**Very weak**	**0 to 3 marks (Mid-Point 2 marks)**

For this question, an answer should be limited to a maximum of 13 marks if there is no evidence of evaluation.

A maximum of 21 marks may be awarded if there is no explicit reference to the data.

Extracts E and **F** provide a number of prompts and it is expected that candidates will make use of these when developing their answers. Whereas Part 07 of the question prompts a candidate to consider a speed camera as a merit good, Part 08 provides the additional prompt to consider a speed camera to be a demerit good, for example through causing rather than reducing road accidents. According to the line of argument taken, the government may end up providing too few or too many speed cameras. Also the social cost of provision may exceed the social benefit of provision.

Issues and areas for discussion include:

Introduction	• identifying the purpose of a speed camera to reduce motorists' speeds of driving • stating that a speed camera may be said to be either a merit good or a demerit good • defining government failure.
Developing the response to the question: **Application**	• drawing on the prompt provided in Extract E that speed cameras reduce the negative externalities caused by driving too fast • drawing on the prompt provided in Extract E that by creating incentives for drivers to vary their motoring behaviour, speed cameras cause accidents • applying these arguments to the issue of whether a speed camera is a merit good or a demerit good.
Developing the response to the question: **Analysis**	• developing a chain of reasoning to explain why speed cameras are a possible source of government failure • developing a chain of reasoning to explain why speed cameras are not a source of government failure • developing a chain of reasoning to explain why speed cameras may be considered an example of a public good • using relevant diagrams for merit goods, demerit goods, positive and negative externalities • analysis of the evidence in the Extracts.

Evaluation	• discussing the analytical consequences of treating a speed camera as either a demerit good, or as a merit good • discussing the issue that their main purpose is to raise revenue for the government • discussing possible unintended consequences of using speed cameras, e.g. drivers slowing down and then accelerating may cause accidents that would not otherwise occur; vandals destroying or damaging speed cameras • discussing the overall economic costs and benefits of speed cameras • discussing the evidence in the data.

Examiners should note that credit can be given for basic evaluation if a candidate simply identifies some of the arguments for and against the view that government failure exists in the provision of speed cameras. Basic evaluation (and good analysis) would allow the answer to achieve a low Level 4. Stronger evaluation is likely to focus on speed cameras as a public good and as such government intervention is required as they are unlikely to be provided by the market. Two issues analysed and evaluated in depth can reach the higher levels in the mark scheme; likewise three or more analysed and evaluated in rather less depth.

USE THE DETAILED LEVELS MARK SCHEME ON PAGES 5 & 6 FOR FURTHER CLARIFICATION

MAXIMUM FOR PART 08: 25 MARKS