



# Examiners' Report

## June 2010

### GCE AS and A Level Economics 6EC01 01



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## Introduction

### General Comments

This was the fourth 6EC01 exam paper from the new specification launched in September 2008. The structure of the paper require candidates to answer eight supported multiple choice questions, each being worth up to 4 marks (and so totalling 32 marks). Candidates then select a data response question from a choice of two, totalling 48 marks.

Most candidates completed the paper in the time available but a minority appeared to struggle developing their answers towards the end. Consequently, future 6EC01 papers will have just five sub-questions (instead of six) within each data response section. The maximum mark base for an individual sub-question will also rise from 12 to 14. This should make it easier to complete the exam paper in the one and a half hours available.

Overall, the paper appeared accessible to the vast majority of candidates and differentiated effectively between the qualities of responses. The mean score was 46.3 (compared to 45.3 in June 2009) and the standard deviation 13.9 (compared to 14.0 in June 2009).

It was pleasing to see a good standard of responses and there were a significant number of sophisticated answers which scored very high marks. There were very few candidates who could not answer some of the questions on the paper.

The performance on individual questions is considered in the next section of the report and there are two examples of candidate work for each one. These examples act as a guide as to why a question was well answered and also on how to improve further.

### Section A: supported multiple choice questions

Most candidates find this method of testing highly accessible. The mean score for the supported multiple choice questions was 20.32 out of a total of 32 marks (compared to 20.0 in the June 2009 series). As with the previous papers, candidates found the 3 market failure questions (Q6-8) more challenging than those covering the operation of markets.

The key to success involves defining the main concept(s) in the question (awarded 1 or 2 marks) and applying appropriate economic theory and analysis (usually awarded up to 2 marks). Annotation of the diagrams provided in any question is a good strategy, for example, Q4, Q5 and Q8. In addition, Q1, Q2, Q3 and Q6 offered scope for candidates to introduce diagrammatic analysis as a means of demonstrating their knowledge and understanding of the issues at hand. One should remember that the foundation of this paper is the understanding of the price mechanism model and its limitations. Any opportunity to demonstrate this model should be taken.

In order to maximise candidate performance it is possible to achieve the full three explanation marks even when selecting the incorrect option. This happened occasionally, suggesting that either an accidental mistake was made in placing the incorrect letter in the answer box or that a good understanding of the issue being examined was held by the candidate.

Some candidates attempted to gain marks by eliminating incorrect options. Up to three marks are available for successfully eliminating three incorrect options (providing that three separate reasons are offered). However, mixed success was achieved here. It requires candidates to explicitly state the option key being rejected and then to offer an appropriate explanation. It was surprising to still find a significant number of candidates failing to identify the incorrect

option key and so not alerting the examiner to their rejection.

Several examples of how to successfully eliminate incorrect options are provided in the following candidate responses. A certain skill is required for this and it is important to practise the technique. The mark scheme also offers guidance on how to reject incorrect options.

Note, it is perfectly acceptable to use a combination of techniques for securing the three explanation marks, for example, explaining the correct answer, diagrammatic analysis and eliminating one or more incorrect answers.

#### Section B: data response questions

The data response questions have a substantial weighting for evaluation marks (16 out of 48 marks). Consequently, it is vital that candidates make evaluative comments when required by the question as these may comprise up to half the marks available for the higher mark tariff questions.

In future 6EC01 papers, a 14 mark question will include 6 evaluation marks and a 12 mark or 10 mark question will include 4 evaluation marks.

Attention should also be directed to the quality of written communication (QWC), especially in those questions identified by an asterisk in the question paper. Here, candidates should attempt to develop a coherent argument and take into account grammar and presentation. Although no explicit marks are awarded for QWC, it forms part of the overall impression that examiners take into account when awarding marks.

Both data response questions were accessible to candidates. Question 9 (Rising food prices) was a more popular choice with 59% of candidates selecting this, compared to 41% choosing Q10 (The motor vehicle market). The mean score for Q9 was 26.28 and for Q10 25.88 out of a total of 48 marks. These scores suggest the questions are highly comparable in terms of the demands placed upon candidates and in the marking process.



### **Question 1**

Overall, this question was answered well. The vast majority of responses selected correct option C (1 mark) and many offered suitable diagrammatic analysis, which involved movement along a production possibility frontier. Since two key concepts were involved in this question (opportunity cost and production possibility frontier) it was possible to gain two marks by defining both of them.

Relatively few candidates attempted to gain marks by rejecting incorrect options and this was not done very well. Some responses stated that option D was wrong since a production possibility frontier does not show equilibrium price - and then failed to develop further. The obvious development would be to mention that a demand and supply diagram is required to show equilibrium price or, that a production possibility frontier only focuses on supply potential whereas an equilibrium price requires both demand and supply curves.



## Examiner Comments

3 out of 3 explanation marks awarded.

Like many sound answers, the candidate starts by defining the key concepts of production possibility frontier and opportunity cost (1+1 marks). A further 2 marks are achieved through explanation of opportunity cost by diagram. Reference is made to a movement along the curve from B to B<sub>1</sub> which involves an opportunity cost of A to A<sub>1</sub>. (Note that a maximum of 3 explanation marks are available here).

1 A production possibility frontier can be used to illustrate the concept of:

(1)

- A External cost
- B Producer surplus
- C Opportunity cost
- D Equilibrium price.

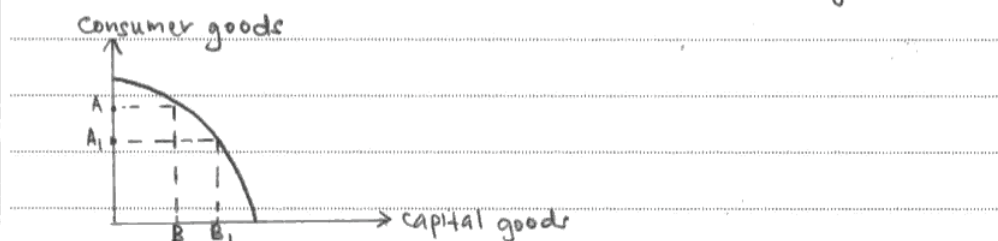
Answer

C

Explanation

(3)

Production possibility frontier shows the maximum output combinations of two goods that an economy can produce when its resources are fully utilized. Opportunity cost is the value of the next best alternative foregone.



In order to produce more of capital goods from B to B<sub>1</sub>, an opportunity cost has to be given up that is A to A<sub>1</sub> of the consumer goods. Hence, production possibility frontier can be used to illustrate the concept of opportunity cost.

(Total for Question 1 = 4 marks)



**ResultsPlus**

Examiner Tip

Be prepared to draw a relevant diagram and make sure it is accompanied with suitable explanation of opportunity cost - otherwise no marks would be awarded for it.


**ResultsPlus**

Examiner Comments

2 out of 3 explanation marks awarded.

The candidate achieves 2 marks for defining a production possibility frontier and opportunity cost. The next step requires suitable application, for example, explaining how an increase in production of one good might involve the reduction in production of another good since scarce resources have to be reallocated from one to the other.

### Section A: Answer all the questions in this section

You should spend 35 minutes on this section. Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.

- 1 A production possibility frontier can be used to illustrate the concept of:

(1)

- A External cost
- B Producer surplus
- C Opportunity cost
- D Equilibrium price.

Answer

C

Explanation

(3)

Production possibility frontier are two different combinations of a good which a country can produce if the resources are fully utilised. Opportunity cost is a cost of an action measured in terms of the next best alternative foregone. The curve on the PPF shows the change in opportunity cost depending on the axis of the PPF while allocating resources. That is why PPF can be used to illustrate the concept of opportunity cost.


**ResultsPlus**

Examiner Tip

There are 3 explanation marks available and so think about how these can be achieved. It should be obvious that 2 explanation marks have been gained from the definitions and that some further development is required.

## Question 2

Overall, this question was answered well. The vast majority of responses selected correct option D (1 mark) and many offered suitable diagrammatic analysis, automatically scoring 2 explanation marks in the process. It was most pleasing to see so many candidates recognise the importance of a supply and demand diagram for explaining their answer.

This answer is a typical example of those candidates who achieved full explanation marks. Remember that 6EC01 focuses on the price mechanism and so be prepared to use it whenever appropriate.



### ResultsPlus

#### Examiner Comments

3 out of 3 explanation marks awarded.

Full marks are achieved by identifying that a decrease in the cost of machinery will lead to lower cost of production (1 mark) and then offering a relevant diagram which depicts the supply curve increasing and price falling (2 marks).

- 2 Which of the following factors is most likely to cause the price of gold to fall without a shift in the demand curve?

(1)

- A An increase in national income ✖
- B A decrease in the price of silver ✖
- C An increase in the wages of gold miners ✖
- D A decrease in the cost of machinery used in gold mining. ✔

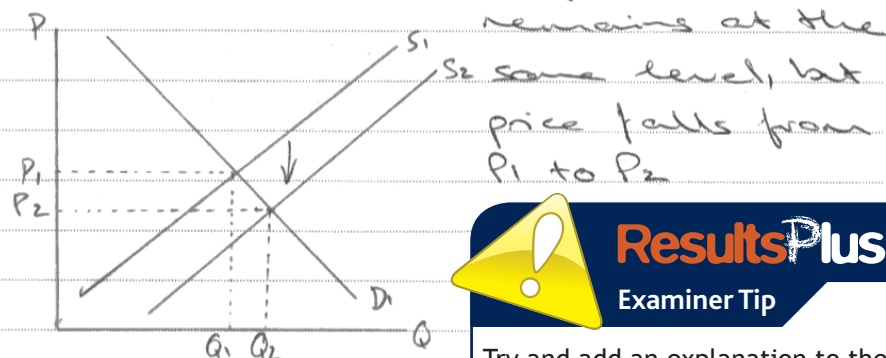
Answer



Explanation

(3)

A decrease in the cost of machinery will mean the cost of production is less. Gold can then be sold at a lower price but still achieve the same amount of profit. Demand



### ResultsPlus

#### Examiner Tip

Try and add an explanation to the correct key rather than just repeating the sentence. For example: a decrease in the cost of machinery used in gold mining 'will mean the cost of production is less'. It is the last part which scores the mark rather than the repeat of the sentence in the correct key.

Not all candidates offered diagrammatic analysis. Nevertheless, it was still possible to achieve full marks by referring to production costs falling (1 mark), greater incentives to produce (1 mark) and an increase in the supply of gold (1 mark). However, in this example the candidate achieves two explanation marks.



## ResultsPlus

### Examiner Comments

2 out of 3 explanation marks awarded.

One explanation mark is gained for stating that the supply (of gold) will increase and so lead to a drop in price. A second explanation mark is achieved by rejecting option B. Note that reference is made to silver and gold being substitutes and that a fall in the price of silver would cause a decrease in the demand for gold. This is the correct way of rejecting an option.

- 2 Which of the following factors is most likely to cause the price of gold to fall without a shift in the demand curve?

(1)

- A An increase in national income
- B A decrease in the price of silver
- C An increase in the wages of gold miners
- D A decrease in the cost of machinery used in gold mining.

Answer



Explanation

The machinery used will increase the supply<sup>(3)</sup> and an increase in supply will cause a price drop. The answer cannot be B as a decrease in the price of silver could decrease the demand curve for gold as gold and silver are substitute goods.



## ResultsPlus

### Examiner Tip

Always state the option key which is being rejected so that the examiner is alerted to consider the response.

### Question 3

Most candidates selected correct option B (1 mark) and understood consumer surplus. However, a significant number of answers selected incorrect option A, confusing the buyer of the holiday cruise with staff on the cruise who gained a wage increase.

This was another question which offered scope for diagrammatic analysis. Up to two marks could be achieved by showing the original and new level of consumer surplus through a demand and supply diagram (where the supply curve is shifted outwards).

A pleasing number of responses successfully rejected option C, stating that an increase in the price of the holiday to £3000 would eliminate Neringa's consumer surplus completely.

- 3 Neringa is prepared to pay £2,500 for a luxury cruise to the Caribbean. If the current price is actually £2,000, which of the following might cause her consumer surplus to increase?

(1)

- A An increase in wages paid to cruise holiday workers by £500 per year
- B A decrease in value added tax placed on luxury cruise holidays
- C An increase in the price of the cruise to £3,000
- D A decrease in the number of companies offering luxury Caribbean cruises.

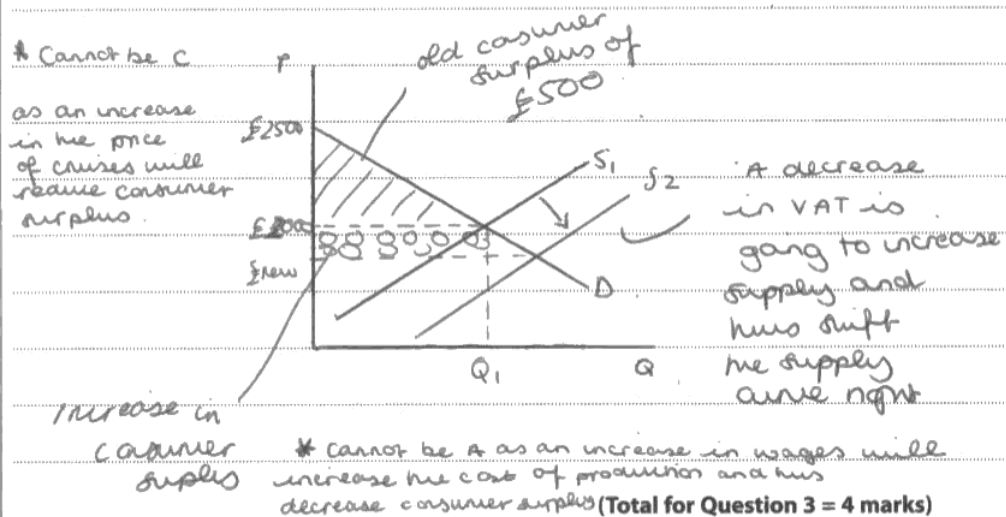
Answer

B

Explanation

(3)

consumer surplus is the difference between the price the consumer is willing to pay and the price they actually pay



**ResultsPlus**

Examiner Comments

3 out of 3 explanation marks awarded.

This is an excellent answer and there are various ways full marks are gained. The definition of consumer surplus (1 mark) is supported by diagrammatic analysis showing the effects of a decrease in tax - shifting the supply curve to the right; both the original and increase in consumer surplus is depicted (2 marks). Then the candidate calculates the original consumer surplus at £500 (1 mark). Finally a successful rejection of option A is done by mentioning how an increase in wages will raise production costs and so reduce consumer surplus (implicit price rise of the holiday).

**ResultsPlus**

Examiner Tip

Be careful in rejecting incorrect options and make sure some value is added to the answer. The candidate does not quite reject option C properly. The increase in price of the holiday to £3000 would actually eliminate Neringa's consumer surplus.



## ResultsPlus

### Examiner Comments

2 out of 3 explanation marks awarded. The examiner is always trying to mark in a positive way. In this response 1 mark is gained for defining consumer surplus and 1 mark for explaining how a decrease in tax on the luxury cruise would cause price to fall and so raise Neringa's consumer surplus.

The rest of the answer is incorrect yet no marks are deducted for this. The candidate shifts the demand curve (rather than the supply curve) and incorrectly identifies the area of consumer surplus. Even the final statement about Neringa being prepared to pay more than £2500 for the holiday shows a lack of understanding.

- 3 Neringa is prepared to pay £2,500 for a luxury cruise to the Caribbean. If the current price is actually £2,000, which of the following might cause her consumer surplus to increase?

(1)

- A An increase in wages paid to cruise holiday workers by £500 per year
- B A decrease in value added tax placed on luxury cruise holidays
- C An increase in the price of the cruise to £3,000
- D A decrease in the number of companies offering luxury Caribbean cruises.

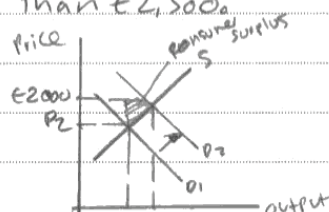
Answer

B

Explanation

(3)

consumer surplus is the difference between the amount consumers are willing and able to pay for a good and the amount they actually pay. A decrease on tax in luxury cruise holidays will cause the price of the holiday to decrease as a result demand for the cruise will increase from  $P_1$  to  $P_2$ . As a result consumer surplus will increase because Neringa is prepared to pay more than £2,500.



(Total for Question 3 = 4 marks)



## ResultsPlus

### Examiner Tip

Ensure you can distinguish between the factors which shift supply curves from those which shift demand curves.

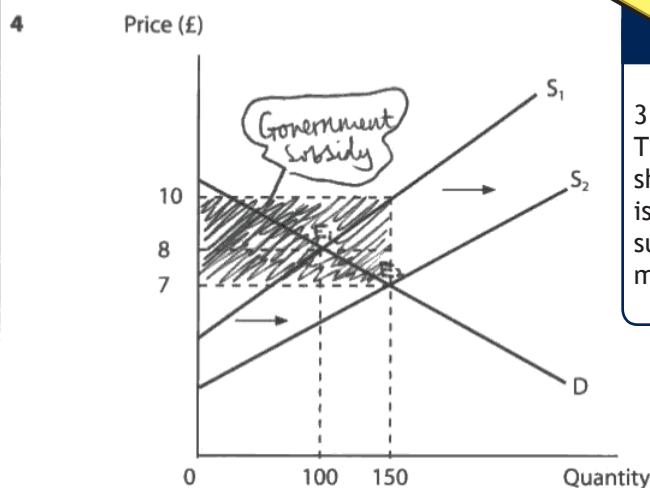
Also, make sure you define consumer surplus properly - some responses mistakenly omit 'the difference between' and so do not secure the mark.



### Question 4

Overall this question was answered well. Most candidates selected correct option C (1 mark) and proceeded to define a subsidy (1 mark) and show the relevant calculations (2 marks). Various definitions of a subsidy were accepted, the main idea being that it is a grant given to firms to increase production and so reduce price of a good. It should encourage more consumption.

A significant number of answers selected incorrect option B, believing the subsidy is only offered to the extra output of 50 rather than the whole output of 150 goods.



The diagram illustrates the effect of a government subsidy on a good. The total government expenditure on the subsidy will be:

(1)

- A £100
- B £150
- C £450
- D £1,050.

Answer

C

Explanation

A Subsidy is given by a Government to increase the provision of a product on the market by reducing costs for the supplier so that price can decrease. Before the subsidy, the market equilibrium was at  $E_1$ , the subsidy (shaded area) moved this to  $E_2$ . In order for this reduction in price to £7 the government had to spend (£3 × 150) £450 on the subsidy.



**ResultsPlus**

Examiner Comments

3 out of 3 explanation marks awarded.

The candidate defines a subsidy (1 mark) and then shows the correct calculations (2 marks). 1 mark is also awarded for identifying and shading in the subsidy area on the diagram (however, maximum marks are already achieved here).



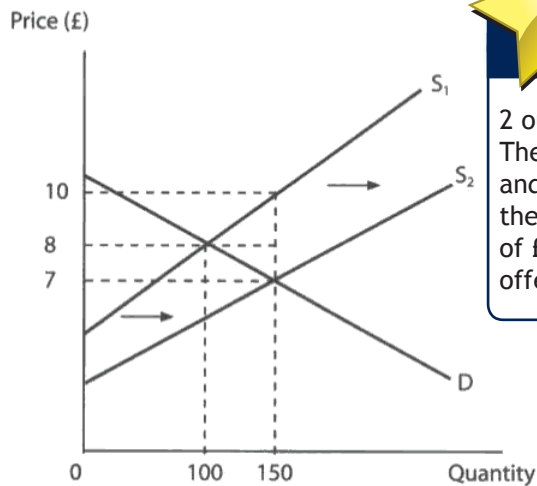
**ResultsPlus**

Examiner Tip

Always show the workings in numerical questions as marks are often allocated to this.

(3)

4



The diagram illustrates the effect of a government subsidy on a good. The total government expenditure on the subsidy will be:

(1)

- A £100
- B £150
- C £450
- D £1,050.

Answer

C

Explanation

(3)

$$10 - 7 = 3 \quad \text{Area of box above } S_2$$

$$150 \times 3 = 450 \quad \text{curve} = \text{The } \# \text{ subsidy}$$

The total area of the rectangle above the final supply curve is the government subsidy given to the producer.

(Total for Question 4 = 4 marks)

**ResultsPlus**

Examiner Comments

2 out of 3 explanation marks awarded. The candidate recognises the unit subsidy is £3 and multiplies this by output of 150 to obtain the total government spending on the subsidy of £450 (2 marks). No definition of a subsidy is offered nor annotation of the diagram.

**ResultsPlus**

Examiner Tip

Be prepared to annotate any diagrams in the question. By shading in the total subsidy area and labelling it 1 mark would be scored.

### Question 5

Most candidates selected correct option C (1 mark) and recognised that the complementary relationship between goods X and Y. This was usually supported by a definition or formula of cross elasticity of demand.

However, the number of candidates who gained full marks was not as high as expected, perhaps reflecting the lack of application to the diagrams. In particular, some candidates failed to mention how the fall in price of good X has caused an increase in demand for good Y.

A significant number of candidates selected incorrect option A, believing the goods X and Y to be substitutes. It appears they became confused between a positive cross elasticity of demand and the idea that demand rises for both goods.

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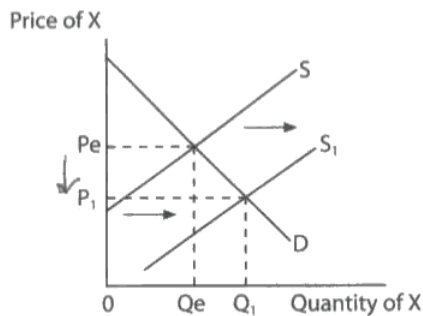
Examiner Comments

3 out of 3 explanation marks awarded.

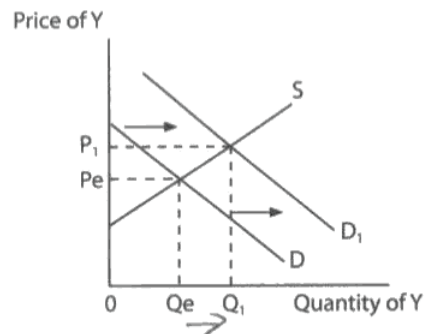
This is an excellent answer. The candidate defines cross elasticity of demand (1 mark), states the goods are complementary with a negative correlation (1 mark) and correctly applies to computer games consoles and games software (1 mark). On top of this, marks would also be gained for rejecting options A and B (except that full marks have already been attained here).

5

## Market for X



## Market for Y



The diagrams show the effects of an increase in supply of good X on the demand and price of good Y. Which of the following is most likely to be represented by good X and good Y?

(1)

- A Lamb and chicken
- B Bus travel and potatoes
- C Computer games consoles and computer games software
- D Leather and beef.

Answer

C

Explanation

(3)

Cross price elasticity of demand is the responsiveness in demand for good X due to a change in price of good Y. As the price of X decreases, the demand for Y increases. This indicates a negative correlation and therefore complement goods. A fall in price of computer games consoles caused demand to increase for the computer games software. A is wrong because lamb and chicken are substitutes and have a positive XED. B is incorrect because they have  $XED = 0$  and therefore no correlation.

(Total for Question 5 = 4 marks)



ResultsPlus

Examiner Tip

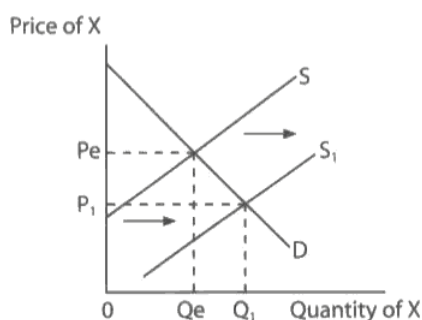
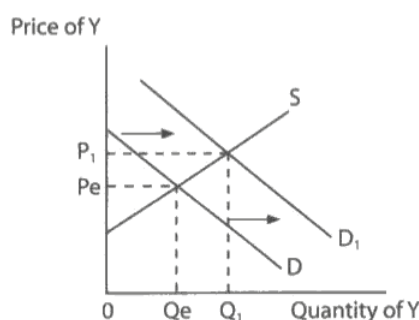
When rejecting an incorrect option, try and explain the economics behind it. This is done successfully here. For example, Option A is wrong because lamb and chicken are substitutes with a positive XED (1 mark) and option B is incorrect because bus travel and potatoes have no relationship so a zero XED (1 mark).


**ResultsPlus**

Examiner Comments

2 out of 3 explanation marks awarded.

The candidate shows the formula for cross elasticity of demand (1 mark) and then identifies a complementary relationship between the goods (1 mark). No application is offered.

**5 Market for X**

**Market for Y**


The diagrams show the effects of an increase in supply of good X on the demand and price of good Y. Which of the following is most likely to be represented by good X and good Y?

(1)

- A Lamb and chicken
- B Bus travel and potatoes
- C Computer games consoles and computer games software
- D Leather and beef.

Answer

C

Explanation

(3)

$$XED = \frac{\% \Delta QD \text{ good } x}{\% \Delta P \text{ good } y}$$

The graphs goods x and y are complements. This is shown on the graph as the quantity demanded increasing for both good x and good y.  
The only complements in the multiple choice answers are Computer games and computer games consoles.


**ResultsPlus**

Examiner Tip

Be prepared to apply to the context of the question. For example, 1 mark can be gained by stating that a fall in price of computer games consoles would cause an increase in demand for computer games software.

### Question 6

A wide variety of responses were recorded for this question. The best answers usually started with a definition of tradable pollution permits and then offered diagrammatic analysis to show that by reducing supply of allowances, the price would be driven up and so encourage firms to cut back on pollution emissions. In effect, firms have greater incentive to introduce clean technology that would reduce carbon emissions and might even enable them to sell on any spare pollution permits.

- 6 Tradable pollution permits would be more effective in reducing carbon dioxide emissions within the European Union (EU) if:

(1)

- A There is an excess supply of pollution permits  $\times$
- B Major polluting industries such as air travel are excluded from the carbon trading system  $\times$
- C It is difficult to monitor and prosecute firms for exceeding their pollution permits  $\times$
- ☒ D The EU is prepared to decrease the supply of pollution permits if the price falls too low.

Answer

D

Explanation

(3)

Tradable pollution permits are permits given out to firms that state the maximum level of pollution they are allowed to produce. These permits are also tradable between firms as less efficient firms may ~~see~~ buy permits for more-efficient firms. However, price for pollution permits may fall too low if there is an excess supply of permits or if there is very little demand for these permits to be traded. Hence these would render the permits null and void if the price falls too low as firms can just increase purchase of these permits and increase pollution levels. Therefore the EU should be prepared to decrease the supply of such permits if the price were to fall too low.

(Total for Question 6 = 4 marks)

**ResultsPlus**

Examiner Comments

3 out of 3 explanation marks awarded.

The candidate explains pollution permits by referring to the idea of a quota and the tradable nature of them (1 mark). Diagrammatic analysis is offered depicting a decrease in supply of permits and an increase in their price (2 marks). Note the inelastic nature of the supply curve for permits since these are determined by the authorities.

**ResultsPlus**

Examiner Tip

Be prepared to use relevant diagrammatic analysis. 6EC01 focuses on the price mechanism model and so often there are marks to be gained in its application.




**ResultsPlus**

Examiner Comments

2 out of 3 explanation marks awarded.

The candidate understands tradable pollution permits (1 mark) - in particular, the idea of limits imposed on pollution and that these can be bought and sold between firms.

A good explanation is given of the effects of a low price for permits in terms of enabling firms to purchase additional quantities to increase their pollution levels (1 mark).

- 6 Tradable pollution permits would be more effective in reducing carbon dioxide emissions within the European Union (EU) if:

(1)

- A There is an excess supply of pollution permits  $\times$
- B Major polluting industries such as air travel are excluded from the carbon trading system  $\times$
- C It is difficult to monitor and prosecute firms for exceeding their pollution permits  $\times$
- D The EU is prepared to decrease the supply of pollution permits if the price falls too low.

Answer

D

Explanation

(3)

Tradable pollution permits are permits given out to firms that state the maximum level of pollution they are allowed to produce. These permits are also tradable between firms as less efficient firms may ~~see~~ buy permits for more-efficient firms. However, price for pollution permits may fall too low if there is an excess supply of permits or if there is very little demand for these permits to be traded. Hence these would render the permits null and void if the price falls too low as firms can just increase purchase of these permits and increase pollution levels. Therefore the EU should be prepared to decrease the supply of such permits if the price were to fall too low.


**ResultsPlus**

Examiner Tip

Be prepared to extend the correct option statement with economic analysis. For example, with regards to the last sentence, the candidate should mention that a decrease in supply of permits would increase their price and so give an incentive to firms to reduce pollution levels. This would secure a further mark.

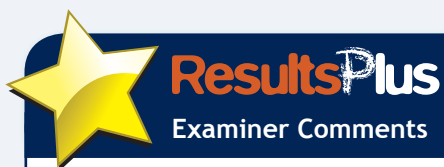
(Total for Question 6 = 4 marks)



### Question 7

Overall, many answers got off to a disappointing start by selecting incorrect option B. Taxing the consumption of public goods will not work since people are still able to consume them without making payments - this is the nature of the free rider problem (consuming without paying once it is provided).

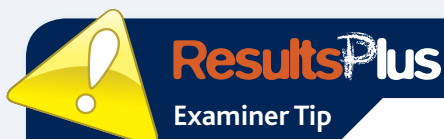
It means the government should provide public goods and not attempt to tax according to individual consumption. Instead, funding could come from a system of general taxation. The correct answer is option A.



3 out of 3 explanation marks awarded.

The candidate defines a public good in terms of non-excludability and non-rivalry (1 mark) and offers an example with street lighting (1 mark).

The free rider problem is explained in terms of one consumer paying for a good and then other consumers being able to enjoy it without paying. The difficulty of charging consumers for the good, once supplied, comes across well here (1 mark).



To secure marks define key terms in the question, for example, the free rider problem and public goods (1+1 marks).

Also, remember that the free rider problem is concerned with the difficulty in charging consumers for a good once it is provided - so little incentive to provide it in the first instance.

This is a good example of how it is possible to achieve full explanation marks despite selecting the incorrect option.

7 Which of the following forms of government intervention could help to solve the free rider problem?

(1)

- ☐ A Provision of public goods
- ☐ B Taxation on the consumption of public goods
- ☒ C Banning the consumption of luxury goods
- ☐ D Granting of subsidies to goods which yield high external costs.

Answer

A

Explanation

(3)

Free markets where resources are allocated through price mechanism (no government intervention) are characterised by free rider problem.

Free rider problem occurs when providing public goods. Public goods are such goods which are non-excludable and non-diminishable.

So when one consumer pays for it, others can enjoy it as well although they are not paying. An example would be street lights.

It is hard to collect money from consumers benefiting from a public goods therefore firms are reluctant to provide those.

By providing public goods government solves free rider problem.

- 7 Which of the following forms of government intervention could help to solve the free rider problem?

(1)

- A Provision of public goods
- B Taxation on the consumption of public goods
- C Banning the consumption of luxury goods
- D Granting of subsidies to goods which yield high external costs.

Answer

☒ B

Explanation

(3)

The free rider problem occurs when a good is paid for by one person but everyone enjoys it for free. A public good is non-rivalrous and non-excludable meaning you can't stop people enjoying it. An example is street lighting, if one person pays then whole street will benefit. The way to stop is to charge people to use the public goods. This means if everyone together pays for street lighting then enjoys it together there is no one benefitting for free as all will have contributed.

(Total for Question 7 = 4 marks)


**ResultsPlus**
**Examiner Comments**

3 out of 3 explanation marks awarded.

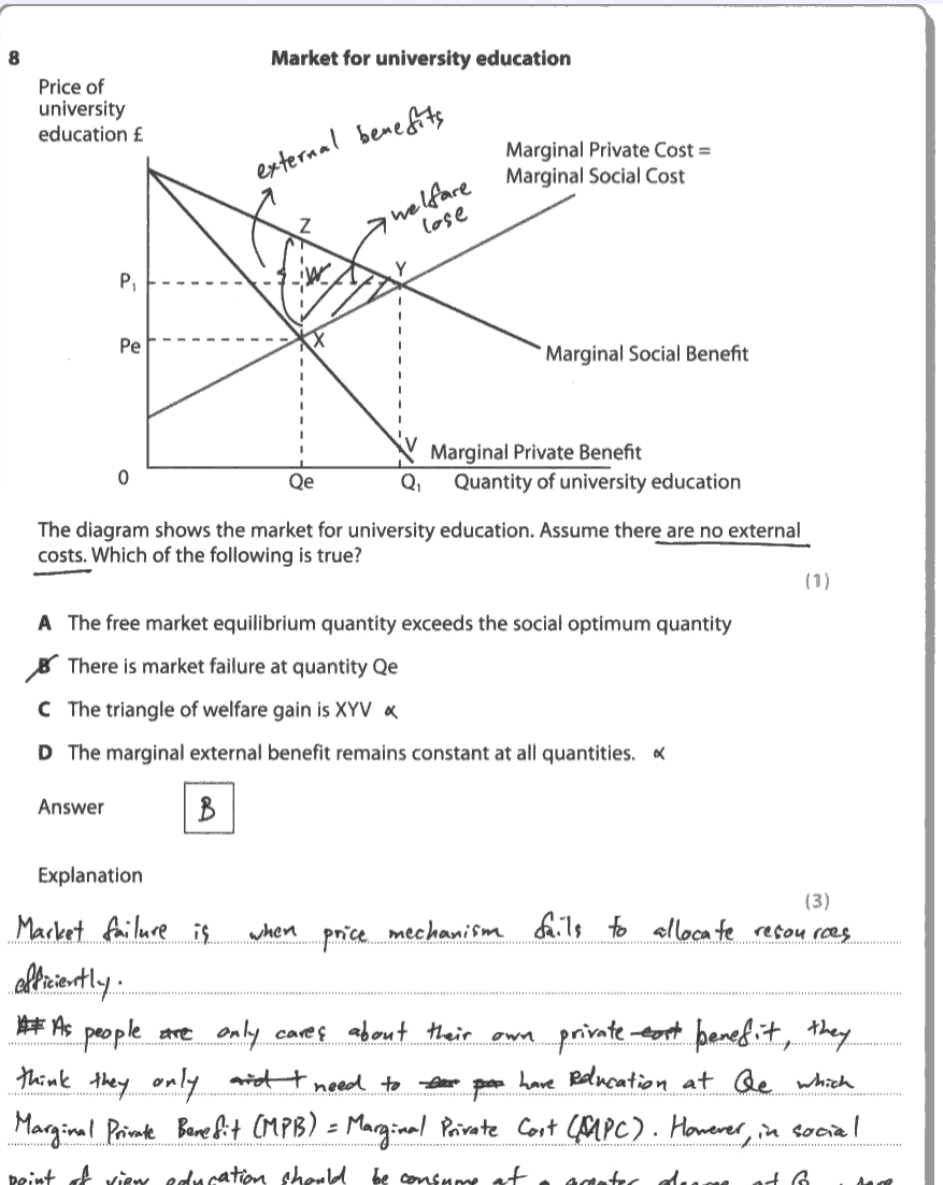
The candidate explains the free rider problem and defines a public good (1+1 marks). Application is offered to street lighting (1 mark).


**ResultsPlus**
**Examiner Tip**

Offer real world examples in application to secure a mark.

### Question 8

This was another question where the wrong option was frequently chosen. Many candidates mistook the triangle of welfare loss XZY with that of XYV and so selected incorrect option C. Often these answers tried to explain the welfare loss area rather than focus on market failure in university education as directed by correct option B.



**ResultsPlus**

## Examiner Comments

3 out of 3 marks awarded.

Market failure is defined (1 mark) and the area of welfare loss identified on the diagram (1 mark). This is reinforced by identifying the free market and social optimum output positions in terms of  $MPC=MPB$  and  $MSC=MSB$  (1+1 marks) and so university education should be consumed to a greater degree.

**ResultsPlus**

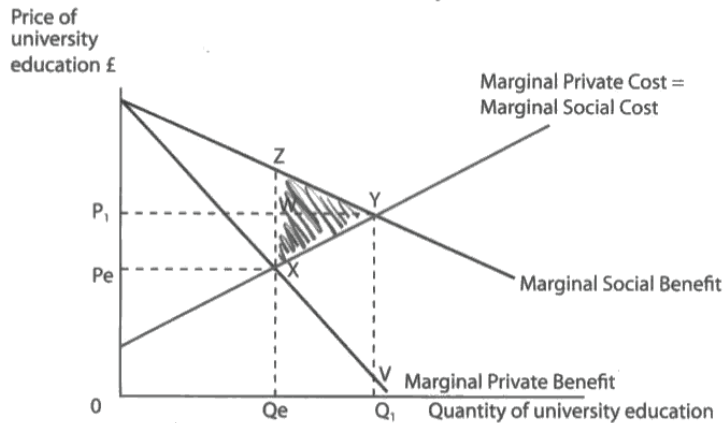
## Examiner Tip

3 out of 3 marks awarded.

Market failure is defined (1 mark) and the area of welfare loss identified on the diagram (1 mark). This is reinforced by identifying the free market and social optimum output positions in terms of  $MPC=MPB$  and  $MSC=MSB$  (1+1 marks) and so university education should be consumed to a greater degree.

8

## Market for university education



The diagram shows the market for university education. Assume there are no external costs. Which of the following is true?

(1)

- A The free market equilibrium quantity exceeds the social optimum quantity
- B There is market failure at quantity  $Q_e$
- C The triangle of welfare gain is  $XYV$
- D The marginal external benefit remains constant at all quantities.

Answer

B

Explanation

External costs are the private cost plus the costs to society. The answer is not C because the triangle of welfare gain is highlighted as  $XYZ$ . The answer is B because the free market is operating at a lower level than the social optimum which indicates market failure. Market failure is when the free market fails to allocate resources efficiently.

(Total for Question 8 = 4 marks)

**ResultsPlus**

Examiner Comments

2 out of 3 marks awarded.

Option C is rejected by the candidate referring to the welfare gain triangle as XYZ (1 mark). Market failure is also defined (1 mark).

The opening sentence is irrelevant and incorrect here as the focus should be external benefits rather than external costs.

**ResultsPlus**

Examiner Tip

Make effective use of the information in the diagram. By identifying the free market output as  $OQ_e$  and the social optimum output as  $OQ_1$  a mark would be gained. Unfortunately the candidate does not explicitly state these positions in the answer.

### Question 9 (a)

This is a typical data response question. Candidates are tested on their comprehension and analytical skills of the information provided and are then required to use demand and supply to explain changes in price.

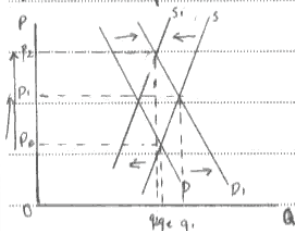
Many candidates scored highly by bringing together a series of techniques, namely: making explicit use of the data; constructing a demand and supply diagram; explaining the causes of the shift in the demand curve and then the causes of the shift in the supply curve.

Perhaps it was surprising that not more candidates secured the full 8 marks available.

(a) With reference to Extract 1 and Figure 1, explain the causes of the increase in the price of food. Use a supply and demand diagram in your answer.

(8)

Figure 1 suggests that there has been an increase in the price of food as there has been a 'growth in the global population' ~~which~~ and 'rising incomes in the developing world', both which will lead to an increase in demand from  $D$  to  $D_1$  and so an increase in price from  $P_e$  to  $P_1$ . There has also been 'increased costs of agricultural production' which means that producing food ~~costs~~ <sup>has</sup> become more expensive and so supply has decreased and shifted to the left from  $S$  to  $S_1$  and so prices have risen from  $P_e$  to  $P_2$ .



This increase in price of food is likely to be very large <sup>as</sup> both demand and supply are inelastic as demand is a necessity so people will continue to buy the good if price increases and supply is difficult to change in the short run as there is only 1 harvest every year and so is inelastic. This is why in figure 1 it shows food prices soaring from about 100 ~~in~~ m 2000 to about 210 (nominal) in 2008 as it is inelastic.



**ResultsPlus**

Examiner Comments

8 out of 8 marks awarded.

The candidate identifies the causes of rising food prices due to the increase in demand (growth in global population and rising incomes) (1+1 marks). This is supported by an explanation of the decrease in supply raising prices too (increased costs of agricultural production) (1 mark). A correct diagram (4 marks) and explicit use of the price data in Figure 1 (1 mark) ensures that this is a top answer.

**ResultsPlus**

Examiner Tip

Always fully label diagrams, for example, the axes, curves and equilibrium positions. If there are two shifts in demand and supply, it is best to put on one overall diagram to highlight the original and final equilibrium price positions.

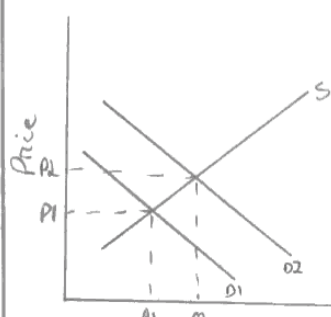
(a) With reference to Extract 1 and Figure 1, explain the causes of the increase in the price of food. Use a supply and demand diagram in your answer.

(8)

The price of food has increased by 100% according to food price indices in ~~terms~~ nominal terms. The sharp rise in commodity prices is most worry because ~~they~~ some commodities are needed for ~~the production of~~ agricultural production. For example oil and water are vital for this process.

Rising incomes in the developing world has triggered a boom of greed. People have been consuming unnecessarily which may have had an inflationary effect on the price of food. This is also linked with people taking food supplies for granted and being wasteful.

Ultimately what we have seen is a rise in demand for food due to factors such as huge global population growth ~~and~~ as well as rising disposable income. This has shifted the demand curve rightwards from  $D_1$  to  $D_2$  thus increasing price.



**ResultsPlus**

## Examiner Comments

5 out of 8 marks awarded.

The causes of the increase in price is outlined (increased demand through global population growth and rising disposable income) (1+1 marks). Data reference to food price rising by more than 100% in nominal terms (1 mark). Fully labelled diagram which depicts an increase in demand and the rise in price (2 marks). However, no reference made to supply here.

**ResultsPlus**

## Examiner Tip

An introductory question offering 8 marks for use of a diagram is likely to require a shift in both demand and supply curves.

### Question 9 (b)

This is a question which includes knowledge, application and analysis marks as well as evaluation marks. Consequently, the examiner breaks down the marking into these two parts. It is important to comment on both parts to achieve full marks.

The majority of responses did not offer an evaluative comment and so were unable to score more than 4 marks.

(b) To what extent are households on low incomes 'hit the hardest by rising food prices' (Extract 1, line 18)?

(6)

Households on low incomes are likely most affected by rising food prices since, as food is a necessity, it will take up a larger proportion of their income than higher income households, meaning that they will have less to spend on other goods and services and so have a ~~lower~~ greater fall in standard of life. However, since there are various <sup>and types</sup> brands of food available, they could simply consume different, lower-price brands and types of food to mitigate the impact of increased food prices. Also, the report states that 'one third of all food is thrown away each year' and that it is perfectly edible, so lower income families could also not be affected to a large degree since they could decrease the proportion of food they throw. However, since a larger proportion of food is likely to be thrown away in richer households, this effect may not have a large effect upon low income households, and so it is likely that lower income households would be hardest hit by rising food prices.

**ResultsPlus**

Examiner Comments

6 out of 6 marks awarded.

Food is a necessity and so takes up a larger proportion of low income households than high income households (1+1 marks). Low income households will have less to spend on other goods and services (1 mark). Low income households could always throw away less food to reduce the problem (1 mark - outside of the mark scheme).

The candidate evaluates by referring to the possibility of low income households switching to consume different, lower priced brands and types of food to mitigate the impact (2 marks).

The quality of written communication is sophisticated and the answer always remains on track, with good analysis and argument. The examiner will take the overall quality of argument into account when awarding marks.

**ResultsPlus**

Examiner Tip

Keep your answer focused on the question and be prepared to develop ideas from the extract. The candidate does this very well here.

(b) To what extent are households on low incomes 'hit the hardest by rising food prices' (Extract 1, line 18)?

(6)

Food is a necessity and therefore is inelastic in demand. A rise in the price of an inelastic demand would effect households on low incomes, adversely as it acts regressively on their income. As price of food rises, more money would be have to be spent on buying up the usual amount of produce that is purchased. Things would be hard for those on low incomes and they may have to cut down on other expenses. This will not be much of a problem to those on high incomes as they have more disposable income that could be spent on the rising price of food than those on low income households. Therefore rising food prices will be a negative impact to a great extent on households with low incomes.



## ResultsPlus

### Examiner Comments

4 out of 6 marks awarded.

The candidate identifies food as a necessity and that it is (price) inelastic in demand (1+1 marks). This means a rise in price of food acts regressively on households with low incomes and so they have to cut down on other expenses (1+1 marks). The detrimental impact of rising food prices on low income households is reinforced by suggesting that high income households will not be affected so badly. Overall, 4 marks is the correct score.



## ResultsPlus

### Examiner Tip

Always offer an evaluative comment for evaluation questions (shown by the phrase 'To what extent'). The response clearly achieves all 4 knowledge, application and analysis marks but misses out the 2 evaluation marks.

### Question 9 (c)

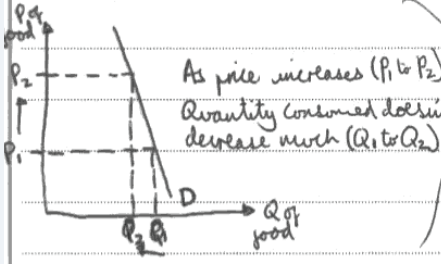
Most answers included a definition of price elasticity of demand and suggested that food is likely to be inelastic since it is an essential good. However, relatively few answers included an evaluative comment. Occasionally some responses confused the determinants of price elasticity of demand with that of supply, misdirecting their answers into a discussion of stockpiles and spare capacity.

The best answers saw past food as a broad category and discussed different types of food and how elasticity may vary, for example, considering basic necessities and luxuries. Examples of necessities included bread and water whereas lobster and champagne were popular choices for luxuries!

(c) Assess whether the demand for food is likely to be price elastic or price inelastic. (6)

The demand for  
Price elasticity measures the responsiveness of Quantity Demanded to a change in price.

The demand for food is likely to be price inelastic; ~~as a normal, essential good~~ as a normal, essential good it is a necessity to survive. Being price inelastic means that it has little substitutes and is a necessity. ~~And the shortage of land~~ mean even more inelastic.



The data also told us that despite a price rise, demand increased, also showing its price elasticity. However, different food products have different elasticities. Milk would be more price inelastic than chocolate, for example.

So it, in the long run, the <sup>PED</sup> demand for certain foodstuffs may increase as people consume less of them as they're expensive.



**ResultsPlus**

Examiner Comments

6 out of 6 marks awarded.

All 4 knowledge, application and analysis marks are secured by defining price elasticity of demand and explaining that food is inelastic since it is an essential good with few substitutes.

The 2 evaluation marks are gained by suggesting that different types of food have different elasticities, for example, milk and chocolate.

(c) Assess whether the demand for food is likely to be price elastic or price inelastic. (6)

(PED)  
~~Demand~~ For Price elasticity of demand measures the responsiveness of the quantity demanded of a good in response to a change in its price. ~~The price~~

Food is a basic necessity. It is price inelastic because no matter how much prices rise, the quantity demanded will experience a less than proportionate change. People ~~will~~ always need to eat in order to live.

For most other goods, elasticity increases over time due to production of substitutes. But there are almost no satisfying substitutes for food, therefore price will remain inelastic even over time.



**ResultsPlus**

Examiner Comments

4 out of 6 marks awarded.

All 4 knowledge, application and analysis marks are gained through defining price elasticity of demand, explaining the meaning of inelastic, identifying food as a necessity and so it has no substitutes.



**ResultsPlus**

Examiner Tip

Offer an evaluative comment. The most obvious thing to discuss is the broad definition of 'food' and that it is useful to break down into different categories where elasticity may differ.

### Question 9 (d)

This question differentiated well. The quality of responses varied enormously from being outstanding to very weak and the full mark range was used. The best answers offered a combination of relevant diagrammatic analysis depicting a guaranteed minimum price and also several evaluative points on its effects.

The weaker answers often confused the guaranteed minimum price with a buffer stocks system or even the idea of a national minimum wage. Consequently, much of the accompanying diagram and discussion were irrelevant.

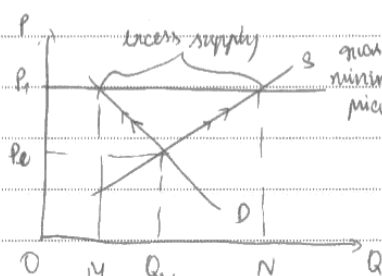
However, some answers were a pleasure to mark and revealed a thorough understanding of government intervention in agricultural markets and the consequences of a guaranteed minimum price.



\*(d) Evaluate the likely economic effects of the introduction of 'guaranteed minimum prices to encourage more domestic agricultural production' (Extract 1, lines 20 and 21). Use an appropriate diagram in your answer.

(12)

Guaranteed minimum price is the price floor set to maintain the minimum price of goods and ensure income for farmers. Its advantage is that it ensures a ready market for the EU farmers so they can produce without concerning about the demand. It also ensure the income for farmers so that they any surplus will be bought up by the government. So in a bumper crop there is



a glut, for instance, farmers do not have to suffer the loss because their goods' prices are guaranteed by the government so price cannot fall dramatically. It helps to stabilise the agricultural goods' prices.

However, if the minimum price is set higher than the equilibrium price, there will be excess supply of MR which is bought by the government. So that it accounts for a number of the budget which otherwise could be spent on other things like education or health care. The store costs



## ResultsPlus

### Examiner Comments

12 out of 12 marks awarded.

The candidate achieves all the knowledge, application and analysis marks in the first paragraph by defining a guaranteed minimum price, showing its impact by diagram and identifying the increase in government spending. This is reinforced by a comment on farmers having more security over their income. Any doubt one might have on awarding the full knowledge, application and analysis marks is dispelled by the quality of the third paragraph; the candidate revisits the positive effects of a guaranteed minimum price.

The following three paragraphs offer various evaluative comments, both negative and positive on the effects of a minimum price. These include a discussion on government finances, producer incentives, efficiency and issues of surrounding the perishability of the food. The candidate deals with the question of government failure successfully here.



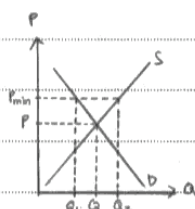
## ResultsPlus

### Examiner Tip

Consider both positive and negative effects of an economic event (such as introducing a guaranteed minimum price). In doing so, one is automatically offering evaluative comments.

\*(d) Evaluate the likely economic effects of the introduction of 'guaranteed minimum prices to encourage more domestic agricultural production' (Extract 1, lines 20 and 21). Use an appropriate diagram in your answer.

(12)



A minimum price is a price set by the government ~~off~~ above the market price to protect producers' welfare. This is because, sometimes producers are forced to sell agricultural products at a very low price, almost equal to the cost of production, in order to sell off their stocks. This causes the producers to gain a very low profit. Thus some resort to stop production altogether. If the government introduces a minimum price, producers will gain a higher profit as they sell their goods at a higher price. However at price  $P_{min}$ , as there is excess supply. Thus, the government will have to buy the surplus of goods amounting to  $(Q_2 - Q_1)$  at the price of  $P_{min}$ .

The government can then store these goods and use it in times of emergency or when there is a shortage. This will encourage ~~the~~ more producers to increase the production of agricultural goods. However, this may also lead to lack of competitiveness as producers of domestic agricultural goods will no longer have to compete with producers of imported agricultural goods. But, at the same time, in the long run, more producers will enter the market due to the promising profits.



**ResultsPlus**

Examiner Comments

8 out of 12 marks awarded.

A fairly brief answer but it remains relevant throughout.

There is an understanding of the minimum price (in terms of protecting producer incomes) which is backed up by a relevant diagram. Reference is made to the idea of farmers having an incentive to produce more and gain profits.

### Question 9 (e) (i)

This was a familiar question and as in the past, candidates were more successful in outlining the term 'external costs' compared to 'private costs'.

There are various ways to gain 4 marks, two of which were allocated to external costs and two to private costs. The following responses reveal some of these ways.

(e) (i) Distinguish between *private costs* and *external costs*.

(4)

Private costs are those which are paid by the consumer or the producer or any supplier and beneficiary in an economic transaction - for example, a smoker pays the price of a packet of cigarettes and the damage to their health, while the shopkeeper gives up the cigarettes, or more broadly speaking the manufacturer pays the price of the tobacco plantation, the labour employed and so on. External costs are those which are paid by neither, and as such must be shouldered by a 3rd party: the smoker's lung operations on the NHS paid for by taxes, the second hand smoke breathed in by passer by, the street cleaner who picks up the discarded butts and so on etc.



**ResultsPlus**

Examiner Comments

4 out of 4 marks awarded.

Private costs are defined in terms of costs to the producer or consumer from an economic transaction (1 mark) and supported with an example of the price paid for a packet of cigarettes (1 mark).

External costs are defined in terms of negative third party effects (1 mark) and supported with an example (passer by breathing in second hand smoke) (1 mark).



**ResultsPlus**

Examiner Tip

Offer examples to support definitions of economic concepts.

(e) (i) Distinguish between *private costs* and *external costs*.

(4)

Private costs are costs experienced by parties involved in an economic transaction. Example of private costs in agricultural production is wages of labourers and food prices.

External costs are cost accrued by third parties not involved in an economic transaction and represent the divergence between social cost and private costs.



**ResultsPlus**

Examiner Comments

4 out of 4 marks awarded.

Private costs are defined in terms of costs experienced by the parties involved in an economic transaction (1 mark) and supported with an example of the wages paid to labour (1 mark).

External costs are defined in terms of costs experienced by third parties not involved in an economic transaction (1 mark) and by the divergence between social cost and private cost (1 mark).



**ResultsPlus**

Examiner Tip

Offer two points to the definition of each concept to secure the 4 marks available.

### Question 9 (e) (ii)

This question differentiated well. It provided the opportunity for candidates to build on their answers to the previous question and apply their knowledge to farming methods.

Unfortunately, a large number reiterated definitions of private and external costs which wasted valuable time as well as earn no marks for their efforts. Defining key terms is relevant but not when the previous lead question tests this very point. Note that in future, the definition questions are likely to disappear from the data response section as the number of sub-questions fall from six to five parts. Then it would automatically be a good idea to define key concepts.

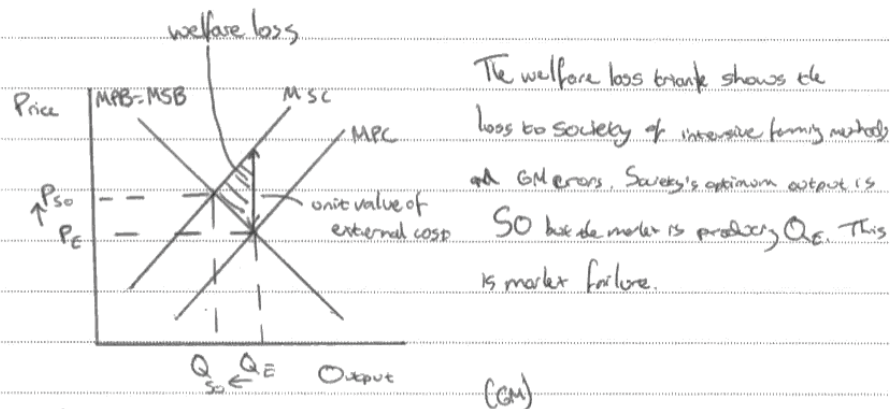
Many responses failed to secure high marks because they presented a rather one-sided argument dominated by environmental narrative while failing to acknowledge the various benefits of intensive farming and GM crops.

Another limitation arose from answers which offered a simple demand and supply diagram (with supply shifting outwards) rather than offering one based on private and external costs.

Despite these limitations, there were some excellent answers which combined relevant diagrammatic analysis with a discussion of the private and external costs from intensive farming and GM crops. Quite often these answers included reference to benefits too.

- \* (e) (ii) With reference to the concepts of private costs and external costs, assess the possible economic effects of 'using intensive farming methods and genetically modified crops' (Extract 1, lines 11 and 12). Use an appropriate diagram in your answer.

(12)



Intensive farming and genetically modified crops are likely to have external costs.

By intensive farming, this may mean that agricultural production becomes unsustainable. <sup>resulting in the collapse of the agricultural sector.</sup> Although in the short term supply will increase due to intensive farming methods, in the long term supply could stop altogether or decrease as farming is so intensive that resources are used up or destroyed e.g. ~~the~~ soil becomes infertile. This would be an external cost. However, GM crops may become resistant to diseases. This would mean an increased harvest and thus an increase in supply. This would cause the price of crops to fall and thus this would increase consumer surplus yet decrease producer surplus. If supply increased enough, surplus crops could be exported in <sup>decrease</sup> ~~increase~~ the balance of trade deficits. <sup>This would be a</sup> ~~total~~ <sup>external</sup> ~~benefit~~ <sup>benefit</sup>.

However GM crops may also be less healthy for consumers. In the long run there have been suggestions that they could cause illnesses such as cancer. This could ultimately result in a less healthy and

therefore less productive workforce. This would be an external cost.

Also the private costs of using intensive farming methods may be very high. It will have a effect on the economy. It depends on the magnitude of the cost. If it is very large then it may even drive agricultural producers out of the market. Also, there may be a cost of installing and producing machinery for more intensive farming or the production of GM crops. This could further increase prices due to a fall in supply, creating inflation. However, these new methods and GM crops will create jobs for people who know how to do it. It will also create jobs for those people who know how to do it. These are external costs. However, private costs will increase too as firms will need to pay for their training.

Also, if machinery is used to farm more intensely, then jobs unemployment will increase because machines will replace workers. Although this will increase efficiency, it will ultimately be bad for the economy as if unemployment rises, spending in the economy falls.

Also, the owners of farms will increase their wealth rapidly but workers are likely to stay on similar wages, increasing inequality.



## ResultsPlus

Examiner Comments

12 out of 12 marks awarded.

The answer focuses on the costs of the farming methods and it is possible to unravel private and external costs within it. The full 6 knowledge, application and analysis marks are easily achieved here - the diagram and its explanation alone was credited with 4 of these marks.

Various evaluative comments can be found within the answer, for example, consideration of possible benefits from these farming practices such as lower prices, greater consumer surplus and a reduced trade deficit. Even here some qualification is made through mentioning that producer surplus could fall and that in the long run food prices might rise, if intensive farming and GM crops prove to be a failure.

There is also discussion on the magnitude of the costs from intensive and GM farming and whether it will lead to more or less job creation. Overall, the answer merits the full 6 evaluation marks.



## ResultsPlus

Examiner Tip

Consider both positive and negative effects of an economic event (such as the economic effects of intensive and GM farming methods). In doing so, one is automatically evaluating.



\* (e) (ii) With reference to the concepts of private costs and external costs, assess the possible economic effects of 'using intensive farming methods and genetically modified crops' (Extract 1, lines 11 and 12). Use an appropriate diagram in your answer.

Using intensive farming methods and GM crops may result in external costs and private costs as it reduce quality of and bio-diversity while increasing risk of crop diseases.



In a free market, farmers will only consider their own private cost and private benefit, hence produce agriculture plants at  $Q_m$  where  $MPC = MPB$ . In a society point of view, agricultural produce should be produced in a lesser degree at  $Q_s$ , where  $MSC = MSB$ .

Overproduction of agriculture produce by the amount of  $Q_s - Q_m$  leads to welfare loss.

Farmers may have a tremendous increase in profits if supply of agriculture produce is rapidly increased.

Also, farmers may take part of their profits to reinvest into their operation in order to improve production and increase supply in the future.

However, farmers may not have an increase in profits after all if people refuses to buy their produce ~~knowing the risks~~ as there are still doubts over the safety of GM crops. Farmers instead may suffer losses.

~~Besides that,~~

How large is the increase in profits of farmers depends on ~~how~~ the elasticity of demand for agriculture produce. If it is inelastic, profits will increase by a huge amount.

**ResultsPlus**

Examiner Comments

8 out of 12 marks awarded.

The candidate achieves the 6 knowledge, application and evaluation marks available. 4 come from the diagram and its explanation and 2 from identifying external costs (reduced quality, bio-diversity and increased risk of crop disease).

At least 2 evaluation marks are gained by discussing the impact on profits. This is done rather well here.



**Question 10 (a) (i)**

Overall this question was answered quite well. Most responses included relevant diagrammatic analysis and use of the extract information to identify the falling sales of motor cars.

Candidates were required to draw a demand and supply diagram and then shift the demand curve inwards, depicting a decrease in total revenue.

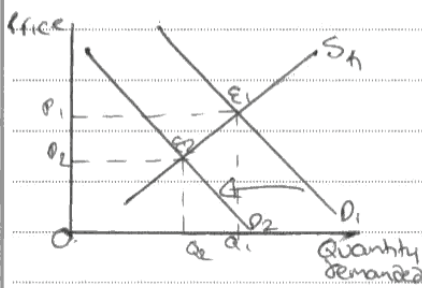
However, a significant number of responses also shifted the supply curve - confusing a contraction in supply with a shift in the supply curve.

Some responses lost focus and discussed the impact of falling motor car sales on car workers and consumers rather than concentrating on the total revenue for car manufacturers.

- (a) (i) With reference to Extract 1 and Figure 1, explain the likely effect on total revenue for car manufacturers following the decrease in demand for new cars between 2007 and 2009. Use a supply and demand diagram in your answer.

(6)

Total revenue is likely to drop significantly as demand for new cars falls from 2007 to 2009. 2009, the estimated drop in sales is 0.42 million as shown in Figure 1. As extract 1 states, "new car sales fell by 21.8% in the first three months of 2009". If demand is falling that rapidly then ~~total revenue~~ <sup>total revenue</sup> is likely to do the same. This is shown in the diagram. As demand shifts from  $D_1$  to  $D_2$ , total revenue drops from  $OP_1E_1Q_1$  to  $OP_2E_2Q_2$ . This shows a significant decrease in total revenue.



### ResultsPlus

#### Examiner Comments

6 out of 6 marks awarded.

The candidate identifies that total revenue will fall (1 mark) and supports this with use of data from the extract (1 mark).

The diagram is awarded the full 4 marks available since the areas of original and new total revenue areas are stated.



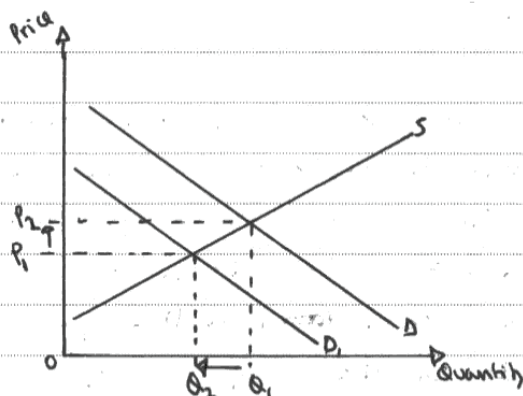
### ResultsPlus

#### Examiner Tip

Make full use of diagrams to answer the question set. In this case, it should be clear that the diagram should be used to show the fall in total revenue.

- (a) (i) With reference to Extract 1 and Figure 1, explain the likely effect on total revenue for car manufacturers following the decrease in demand for new cars between 2007 and 2009. Use a supply and demand diagram in your answer.

(6)



In 2007 (in the UK) 2.4 million new cars were sold however in 2009 the forecast of how many new cars are going to be sold fell to 2.16 million. Cars are the 'second largest expenditure item for consumers after buying a house' & thus in this 'economic downturn' demand for large credit items has decreased, by for car sales have decreased by 21.8% to only a 1% fall in real income as they are price elastic. Thus Revenue for car manufacturers will also fall drastically meaning they will either have to fire people or in drastic cases such as with Vauxhall, close down the factories.


**ResultsPlus**

Examiner Comments

4 out of 6 marks awarded.

The candidate identifies that total revenue for car manufacturers will fall (1 mark) and supports this with data from the extract (1 mark). The diagram is awarded 2 marks.


**ResultsPlus**

Examiner Tip

Offer a definition of the key term in the the question, namely, 'total revenue' as this would gain 1 mark.

### Question 10 (a) (ii)

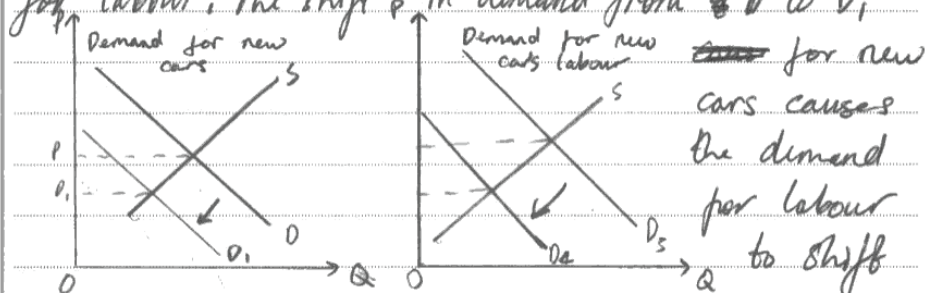
Overall, this question was answered well and many achieved the 4 marks available for knowledge, application and analysis. Indeed, a significant number offered diagrammatic analysis of the product and labour markets but then often failed to go further through delivering an evaluative comment. They may have felt it was enough to secure full marks.

The following examples both include diagrams, though it was quite possible to achieve full marks with using them. For example, explicit reference to the extract, recognition of falling employment and wages, mention of changing working conditions and an evaluative comment was sufficient for full marks.

(a) (ii) Assess the likely impact of the decrease in demand for new cars on the labour market for car workers.

(6)

Labour is a derived demand. Derived demand is ~~the~~ the demand for a good or service to produce another good or service. In this situation, the demand for <sup>the</sup> labour market of car workers is derived from the demand for new cars. A decrease in demand for new cars would then shift the demand for labour inwards, ceteris paribus. This is because the demand for the finished good is a factor that determines the demand for labour. The shift in demand from ~~D~~  $D_1$  to  $D_2$



inwards from  $D_3$  to  $D_4$ . It is a parallel shift and results in a lower wage rate.

Extract 1 backs this point as it tells us Honda reduced its employees by 10% and Nissan announced 1,200 redundancies.

**ResultsPlus****Examiner Comments**

6 out of 6 marks awarded.

The candidate offers diagrammatic analysis showing how a decrease in demand for cars will cause a decrease in demand for car workers. Reference is also made to the demand for labour being a derived demand. 4 knowledge, application and analysis marks are gained here.

2 evaluation marks are secured by suggesting that government subsidies could prevent unemployment from increasing in the car industry. There is also a hint of evaluation by suggesting that if the wage rate is low then there may still be a significant demand for car workers.

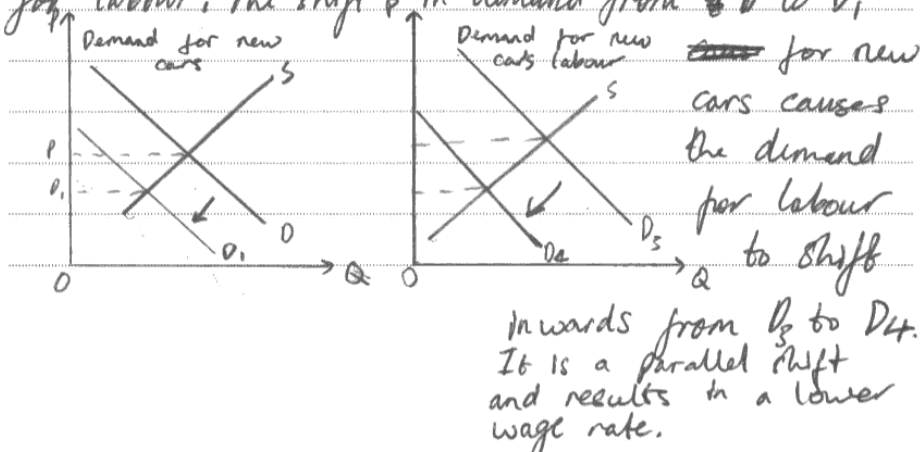
**ResultsPlus****Examiner Tip**

Look for key concepts behind a question and bring it in to your answer. In this case the concept is 'derived demand'.

- (a) (ii) Assess the likely impact of the decrease in demand for new cars on the labour market for car workers.

(6)

Labour is a derived demand. Derived demand is ~~the~~ the demand for a good or service to produce another good or service. In this situation, the demand for <sup>the</sup> labour market of car workers is derived from the demand for new cars. A decrease in demand for new cars would then shift the demand for labour inwards, ceteris paribus. This is because the demand for the finished good is a factor that determines the demand for labour. The shift in demand from ~~D~~  $D_0$  to  $D_1$ .



Extract 1 backs this point as it tells us Honda reduced its employees by 10% and Nissan announced 1,200 redundancies.



## ResultsPlus

Examiner Comments

4 out of 6 marks awarded.

The diagrams and their explanation alone warrant the 4 knowledge, application and analysis marks available. It is a solid answer but lacks evaluation and so capped at 4 marks.



## ResultsPlus

Examiner Tip

Offer an evaluative comment when the question instruction requires it.

### Question 10 (b)

The vast majority of responses demonstrated some understanding of labour immobility and were able to apply to the closure of car manufacturing plants. However, many confined their answers to either occupational or geographical aspects rather than considering both of them.

(b) Explain why labour immobility might be a problem following the closure of car factories.

(6)

The mobility of labour are of two types: occupational mobility and geographical mobility. Occupational mobility refers to the ability to move from one occupation to another. Geographical mobility refers to the movement of labour from one ~~sector~~ <sup>area</sup> to another. Labour who lose jobs from a closure of a car factory may not be able to join another occupation. This could be due to lack of inadequate skills. On the other hand, labour tend to move to locations where factories are present. After losing jobs it may be difficult to move to another area as factors such as social bindings and moving costs come into concern. However, this can be solved by the government by providing training and job information, providing labour with incentives such as moving costs and providing housing facilities.

**ResultsPlus**

Examiner Comments

6 out of 6 marks awarded.

The candidate understands and explains both occupational and geographical aspects of labour immobility. The answer considers the causes and solutions.

For example, car workers may lack the skills (to move into other occupations) and so require training (2 marks). Furthermore, after the closure of car factories workers may find it difficult to move to another area to take work due to social bindings and moving costs. The government could solve this by providing financial incentives such as moving costs and housing facilities and also job information (4 marks). Just enough is done to achieve full marks.



**ResultsPlus**

Examiner Tip

Ensure definitions are precise. In this case, the definition of occupational and geographical mobility of labour should have been extended to refer to the ability to 'take available work'.



(b) Explain why labour immobility might be a problem following the closure of car factories.

(6)

Labour immobility may be a problem as manufacturing is often very specialised and workers may not be able to turn their hands to new jobs easily. This means that workers either have to retrain or find other alternatives. Any type of manufacturing requires the use of fairly unique tools or machinery, which adds to the problem of immobility as workers may not have many transferable skills.

Problems with immobility will exacerbate problems of unemployment, such as the locations of the Vauxhall factories in London and Ellesmere Port, and so workers may have to move to find another job.



**ResultsPlus**

Examiner Comments

4 out of 6 marks

The response could be strengthened by explicitly stating the two types of labour immobility at the outset. The answer focuses on occupational immobility of labour (without mentioning the term), where specialised manufacturing workers lack transferable skills and so require retraining.

Geographical immobility of labour is briefly considered in the last paragraph but needs expanding upon, for example, the reason why it may be difficult for labour to move from one area to another to take available work.



**ResultsPlus**

Examiner Tip

Offer more balance in considering the two types of labour immobility.



### Question 10 (c)

Overall this question was answered well. Most responses defined income elasticity of demand and used the data in the extract to identify that new cars were income elastic. The best answers distinguished between new and used cars, so questioning whether all cars are income elastic in demand.

Weaker responses tended to confuse income elasticity of demand with price elasticity of demand or misunderstand the meaning of 'elastic'.

(c) With reference to Extract 1, discuss whether the demand for all cars is likely to be income elastic.

(6)

Income elasticity of demand is the percentage change in the ~~quantity demanded~~ quantity demanded of a product divided by the percentage change in real income. Extract one states that a 1% fall in real income led to a 21.8% fall in the demand for new cars. This gives a figure of 21.8 on the elasticity, which is extremely income elastic. However, cars are seen by many as a necessity; they are used by a vast majority of people in the UK in which to travel - this suggests that cars are still being purchased, just the cheaper substitute good of second-hand cars. Substitute goods are goods whose demand rises as income falls. The cheapest cars are likely to be much less income elastic than newly-built cars.



**ResultsPlus**

Examiner Comments

6 out of 6 marks.

A succinct answer which hits the relevant points. It includes a formula of income elasticity of demand, data reference and working out that for new cars it is highly income elastic at 21.8 (4 marks).

Evaluation comes in terms of suggesting that cars are a necessity and so they are still being purchased (in the recession). However, they are likely to be second-hand cars which are substitutes for new ones (2 marks). Some confusion arises over substitutes and income but this is ignored.



**ResultsPlus**

Examiner Tip

Define key terms in the question and be prepared to use the data to make simple calculations.

(c) With reference to Extract 1, discuss whether the demand for all cars is likely to be income elastic.

(6)

$$\eta_{ED} = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in income}}$$

$$\eta_{ED} = \frac{-21.8}{-1} = 21.8 \quad \therefore \text{very elastic}$$

These figures for income elasticity from Extract 1 suggest that demand for all cars changes massively as a result of changes in income. This is because 'purchasing a car is the second largest expenditure for consumers' and so is very dependent on reliable income. Cars are also luxury goods, not only to ~~own~~ purchase, but also to insure. Therefore demand is highly responsive to changes in income.



## ResultsPlus

Examiner Comments

4 out of 6 marks awarded.

The candidate secures all the knowledge, application and analysis marks available through a correct formula and calculation of income elasticity of demand (so coming to the conclusion it is elastic). However, no evaluation is offered.



## ResultsPlus

Examiner Tip

Always offer an evaluative comment for discussion based questions - these are evaluative in nature.

### Question 10 (d)

This question differentiated well between the quality of answers. Most responses considered both positive and negative effects of the car scrappage scheme, making use of the information provided. Indeed, the key to success is to build on the various points in the extract and apply economic concepts.

However, some candidates misunderstood the scheme and thought it would lead to more cars on the road and therefore increased pollution and congestion. Other responses exaggerated the benefits and thought it would save the whole economy, pulling it out of recession.

Although considering both the benefits and costs to the scheme automatically offered an evaluative approach, relatively few responses started from the point of view of the impact on different stakeholders such as domestic producers, foreign producers, consumers and the government. This is another way to gain evaluation marks here.

in Figure 2 with CO<sub>2</sub> emissions at their lowest of 158 g/km. This could help to reduce pollution and help the economy as we might not be spending on preventing pollution anymore.

However, there could also be some detrimental effects of this scheme on the UK economy. It is unlikely to help the sale of larger more expensive cars like Jaguars as £2000 is a very small proportion of their total cost meaning that demand for these cars not actually fall, leading to potential unemployment and the closure of factories which would be detrimental to economy.

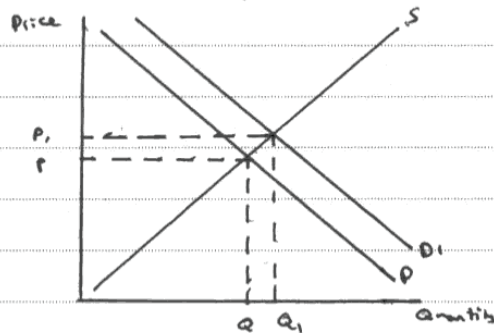
This scheme is also potentially benefiting foreign car manufacturers as 8 out of 10 cars in the UK are imported which means that UK car manufacturers are unlikely to benefit leading to more potential unemployment or reduced wages leading to a potentially worse economy or spending decreases.

There is also a significant opportunity cost involved as although it is only £1000 per car the total cost is likely to be £300 million and as there is uncertainty over whether this scheme will be a success, the economy could have benefited more by spending on other areas like education and healthcare which could have stimulated the economy.

\*(d) With reference to Extract 2 and Figure 2, assess the possible economic effects of the UK government car scrappage scheme.

(12)

In Extract 2 a car scrappage scheme is discussed whereby car owners who scrap their car which is older than 10 years old will receive a grant of £2000 to buy a new car. This is designed to increase demand for new cars which is predicted to hit an all time low in 2009 of 2.16 million new cars bought, by leading to an outward shift in demand curve to  $D_1$  leading to increased price and increased quantity.



It is hoped that this will be able to stimulate the car industry which had been in decline during the recession which resulted in thousands of redundancies and lower wages. If demand increases we could see increased employment in the UK economy as more people are employed to help with the building of cars. This could help the economy through the multiplier effect, defined as where an injection into economy leads to a more than proportional output as these workers will now be employed and have disposable income which they can spend in other areas of the economy, boosting it. New cars are also getting more efficient as shown

in Figure 2 with CO<sub>2</sub> emissions at their lowest of 158 g/km. This could help to reduce pollution and help the economy as we might not be spending on preventing pollution anymore.

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There is also a significant opportunity cost involved as although it is only £1000 per car the total cost is likely to be £300 million and as there is uncertainty over whether this scheme will be a success, the economy could have benefited more by spending on other areas like education and healthcare which could have stimulated the economy.


**ResultsPlus**

Examiner Comments

12 out of 12 marks awarded.

The first page focuses on the benefits of the scheme, where it is suggested it car sales will increase and so reverse the trend. Increased employment and the multiplier effects are also identified. Finally data use is made of Figure 2 which highlights lower carbon emissions from new cars, so benefiting the environment. Overall, these points are just about worth the 6 knowledge, application and evaluation marks available.

On the second page the candidate discusses three disadvantages of the scheme, namely, that it may not benefit the larger and more expensive cars, that mainly foreign car manufacturers will gain most and the costs to the government. These are sufficient to secure the 6 evaluation marks.


**ResultsPlus**

Examiner Tip

For large mark base questions, consider the prospect of 2 marks for each point mentioned.

It is also important to acknowledge the costs and benefits of implementing the scrappage scheme. There will be various external costs associated with the scrapping of vehicles such as costing and increasing pollution in landfill sites. However, it may also benefit the economy and create employment opportunities in this particular industry.

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### ResultsPlus

Examiner Comments

8 out of 12 marks awarded.

This is a well presented and well argued answer but a little brief. Some added value arises from discussing the possible impact of the car scrappage scheme on landfill sites. Two marks were awarded for each paragraph.

As with this answer, many candidates made no use of Figure 2, showing the benefits of low carbon emissions from new cars.



### ResultsPlus

Examiner Tip

Make use of the information provided - this may come in the form of graphs and tables as well as text.

**Question 10 (e)**

Overall, this was not answered very well. Many candidates failed to offer a balanced argument and complete their answers. Some presented a diagram illustrating an increase in demand for cars rather than one showing the impact on the fuel market. Also, following a decrease in fuel duties, some responses incorrectly shifted the demand curve rather than the supply curve, or shifted both of them.

Some answers were very narrow in focus, concentrating on the environmental impact of a reduction in fuel duties and so lacked a range of points.

Some answers spent much time explaining the effects of an increase in fuel duties rather than considering the actual question, namely, the effects of a decrease in fuel duties!

Relatively few candidates considered the significance of price elasticity of demand for fuel or discussed the magnitude of the tax cut.

However, there were some excellent answers which offered a suitable diagram and scope commenting on several of the following: the impact on oil companies, consumers, road haulage companies, car manufacturers, government finances, the environment and economy.

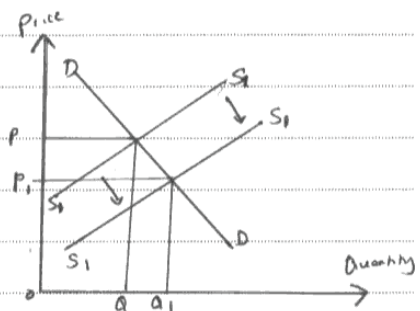


\*(e) Evaluate the possible economic effects of a decrease in fuel taxes, as recommended by The Society of Motor Manufacturers and Traders. Use an appropriate diagram in your answer.

(12)

Tax is a charge by the government on consumption and production. It causes the supply curve to shift to the left and it increases the cost of production.

A decrease in the fuel tax would mean that the cost of fuel would reduce and also thereby causing a rightward shift of the supply curve from  $SS - S_1S_1$ . This would lead to



a fall in prices of fuel. A fall in price of fuel would mean consumers would find it easier to afford fuel so they ~~can~~ would drive more because cost of driving reduces which lifts a burden off them more would prefer driving to school ~~an~~ or to work and more people would buy more cars because of lower running costs. Increasing car sales. The car producers would get better revenue because due to a fall in tax on fuel more people would not be ~~trist~~ afraid to buy cars because the running costs are low. So an increase in the ~~pele~~ demand due to this fall in fuel prices would cause a rise in the revenue of car producers, which would prevent them from closing down and making workers redundant.

\*(e) Evaluate the possible economic effects of a decrease in fuel taxes, as recommended by The Society of Motor Manufacturers and Traders. Use an appropriate diagram in your answer.

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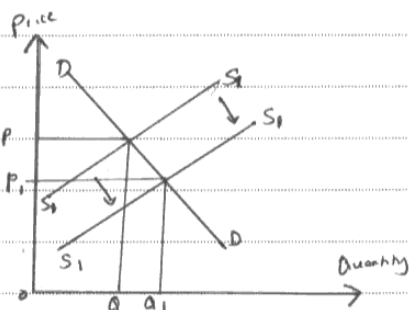
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down and making workers redundant



## ResultsPlus

### Examiner Comments

11 out of 12 marks awarded.

A correct basic diagram is shown where the supply curve for fuel is shifted outwards and so price falls. This is seen to have a positive impact on motorists, car producers and car workers. This is sufficient for 6 knowledge, application and analysis marks.

5 evaluation marks are gained by discussing the negative impact on government finances and the environment.



## ResultsPlus

### Examiner Tip

By developing the evaluation points further or offering a third one, full marks could be gained.

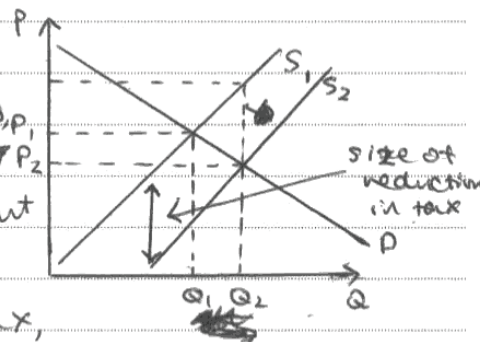
\* (e) Evaluate the possible economic effects of a decrease in fuel taxes, as recommended by The Society of Motor Manufacturers and Traders. Use an appropriate diagram in your answer.

(12)

A tax, is a charge set by the government on firms and consumers, and its uses are either to raise ~~tax~~ government tax revenue or to deter consumption or supply of a good or service.

Fuel taxes in the UK are a major source of revenue for the government, and then are a unit tax. If there was a reduction in the fuel tax, the government would see a great loss in total revenue, and in ~~turn~~ turn, they would have less money to invest in the economy.

<sup>shaded</sup> The area shown in the diagram illustrates  $P_1$  the reduction in tax  $\downarrow P_2$  revenue that the government would see.



Because it is a unit tax, the shift in the supply curve is parallel.

~~With this reduction~~ But with this tax reduction, depending on the elasticity of demand for fuel, the government might not see a fall in overall tax revenue. Because if there is a very elastic demand for fuel, then the small

reduction in price might see a large increase in demand and the government might actually see an increase in tax ~~revenue~~ revenue.

With a reduction in fuel tax it is also likely that demand for cars will go up because they are complementary goods. ~~With~~

So with fuel being cheaper, demand for new cars might go up, meaning you might see increased revenue for car manufacturers, and ~~more~~ an overall increase in welfare in certain areas of the country. But ~~also it depends on other factors in the economy at that moment and also how close substitutes~~ But if car prices are too high at that moment in time, people might opt to ~~choose~~ choose substitute goods such as bus travel or trains, so car manufacturers might not benefit. But with this decrease in fuel price, it might mean that the cost of bus travel goes down, meaning demand for it goes up, and therefore more jobs might be created in growth of public transport.

(Total for Question 10 = 48 marks)

TOTAL FOR SECTION B: 48 MARKS  
TOTAL FOR PAPER: 80 MARKS



**ResultsPlus**

Examiner Comments

10 out of 12 marks awarded.

An explanation of a fuel tax and relevant diagram is shown. This is supported by discussion of fuel and cars being complementary goods (6 marks).

The candidate offers evaluative comments by considering the significance of price elasticity of demand for fuel and how a fuel tax cut might impact on government finances. The answer seems to lose focus towards the end. (4 evaluation marks).



**ResultsPlus**

Examiner Tip

Draw a diagram where demand for fuel is price inelastic - this is more realistic. The original tax area could also have been shown on the diagram.

6EC01 offers an ideal opportunity for candidates to demonstrate their knowledge and understanding of markets and market failure. It also provides the building blocks for candidates to develop and apply their economic knowledge across the whole syllabus.

The key to success in answering supported multiple choice questions is to learn definitions of economic concepts and apply demand and supply analysis to the issues at hand.

The key to success in answering data response questions is to make use of the information provided and apply demand and supply analysis to the issues at hand. It also requires a thorough understanding of market failure and an ability to evaluate when required by the question. The feedback offered in this report should help candidates achieve their full potential in GCE A Level Economics.

#### AS Units Grade boundaries

Grade	Max. Mark	A	B	C	D	E	N	U
Raw boundary mark	80	58	51	44	37	30	23	0
Uniform boundary mark	100	80	70	60	50	40	30	0



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