ResultsPlus

edexcel

Examiners' Report
January 2013

GCE Economics 6EC01 01

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications come from Pearson, the world's leading learning company. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk for our BTEC qualifications.
Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

If you have any subject specific questions about this specification that require the help of a subject specialist, you can speak directly to the subject team at Pearson.
Their contact details can be found on this link: www.edexcel.com/teachingservices.

You can also use our online Ask the Expert service at www.edexcel.com/ask. You will need an Edexcel username and password to access this service. See the ResultsPlus section below on how to get these details if you don't have them already.

ResultsPlus

Giving you insight to inform next steps

ResultsPlus is Edexcel's free online service giving instant and detailed analysis of your students' exam results.

- See students' scores for every exam question.
- Understand how your students' performance compares with class and Edexcel national averages.
- Identify potential topics, skills and types of question where students may need to develop their learning further.

For more information on ResultsPlus, or to log in, visit www.edexcel.com/resultsplus. Your exams officer will be able to set up your ResultsPlus account in minutes via Edexcel Online.

Pearson: helping people progress, everywhere

Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for raising achievement through innovation in education.
Find out more about how we can help you and your students at: www.pearson.com/uk .

January 2013

Publications Code US034380

Introduction

General Comment

There was a strong response to the January 2013 exam paper by the vast majority of candidates. This was demonstrated by many relevant and detailed answers. The paper also differentiated effectively between the quality of responses.

Section A: supported multiple choice questions

Most candidates found this method of testing highly accessible. The quality of responses varied enormously and a relatively high proportion achieved high marks of 28 or more. The best answered questions were Q1 (Positive and normative statements), Q2 (Production possibility frontier and economic growth) and Q4 (Price elasticity of demand and income elasticity of demand for air travel); the least successful answers were Q3 (Movement toward price equilibrium in a competitive market) and Q6 (Price elasticity of supply in the wheat market).

The key to success involved defining the main economic concept in the question (usually awarded 1 mark - but it could be up to 2 marks for two relevant economic concepts) 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, Q3 (Market for maize) and Q7 (Market for vaccinations). In a similar vein, explicit use of the data in Q4 (Price elasticity of demand and income elasticity of demand) offered scope for candidates to gain marks. Other questions, such as Q6 (Price elasticity of supply of wheat) and Q8 (Buffer stocks) gave an opportunity for candidates to introduce diagrammatic analysis as a means of demonstrating their knowledge and application to the issues at hand.

A significant number of responses gained marks by eliminating incorrect options. Up to 3 marks were available for rejecting three incorrect options (providing that separate reasons were offered). However, mixed success was achieved here. It required candidates to explicitly state the option key being rejected and then to offer an appropriate explanation. Several examples of how to successfully eliminate incorrect options are provided in the report.

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

Over half of the candidates selected Question 10 (The price of coal) and with a smaller amount opting for Q9 (North Atlantic fishing). Candidate performance was marginally higher in Q9 compared to Q10. Some interesting areas of the specification were covered, for example, Q9 gave candidates the opportunity to explore the meaning of a sustainable resource with reference to fish stocks in the North Atlantic. Q10 offered the opportunity for candidates to assess the benefits of a tradable pollution permit scheme.

Most responses offered some evaluative comments when required and so were credited with marks. However, some responses were less successful in developing economic analysis in the large mark base questions. This appeared to reflect a trend noted in the A2 exam papers. Despite this, the quality of written communication offered plenty of scope for candidates to develop their answers in a structured and coherent argument.

Question 1

This question offered a gentle introduction to the exam paper. Candidates were required to distinguish between positive and normative statements with reference to the UK tax system. Three-quarters of all candidates achieved full marks.

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 **Statement 1:** In the UK, a 50% tax rate applies on taxable earnings over £150 000 a year.

Statement 2: The 50% tax rate is unfair to high income earners since it reduces their living standards.

Which of the following best describes the two statements above?

(1)

A Statement 1 is normative and statement 2 is positive

B Both statements are positive

C Statement 1 is positive and statement 2 is normative

D Both statements are normative

Answer C

Explanation

Explanation

(3)

A positive statement is a factual statement which can be proved to be true or false with reference to the facts or specific data. Statement 1 is positive because it can be proved as to whether a 50% tax rate applies on taxable earnings over £150,000 a year. A normative statement is one which cannot be proved to be true or false as it is a value judgement. Statement 2 is normative because the term 'unfair' is a value judgement and cannot be proved to be true or false with reference to the facts.

ResultsPlus
Examiner Comments

This answer achieved 4 out of 4 marks.

Correct option C (1 mark).

The definitions of positive and normative statements (1+1 marks) were supported with relevant application to the information provided (1+1 marks). A maximum of 3 explanation marks is available.

ResultsPlus
Examiner Tip

Always refer to normative statements as those based on 'value judgements' which cannot be tested as true or false.

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 **Statement 1:** In the UK, a 50% tax rate applies on taxable earnings over £150 000 a year.

Statement 2: The 50% tax rate is unfair to high income earners since it reduces their living standards.

Which of the following best describes the two statements above?

(1)

A Statement 1 is normative and statement 2 is positive

B Both statements are positive

C Statement 1 is positive and statement 2 is normative

D Both statements are normative

Answer [C]

Explanation

(3)

A positive statement is a stament which can be supported or refuted by evidence. Statement 1 is a fact therefore it is positive whereas Statement 2 is a normative statement which is a statement which cannot be refuted or supported by evidence as it is a value judgement.

ResultsPlus
Examiner Comments

This answer achieved 3 out of 4 marks.

Correct option C (1 mark).

Explanation of positive and normative statements (1+1 marks). No explicit use of the information provided in the question.

ResultsPlus
Examiner Tip

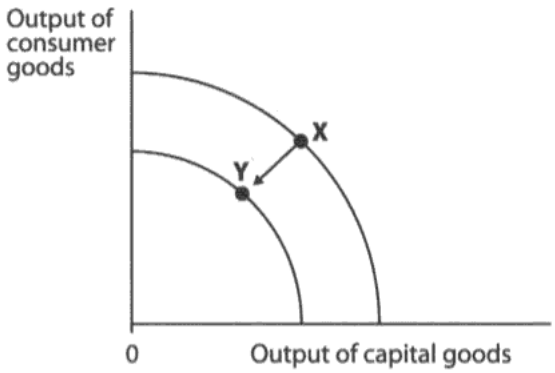
Always use the information provided, for example, statement 2 is normative since it contains the word 'unfair'.

Question 2

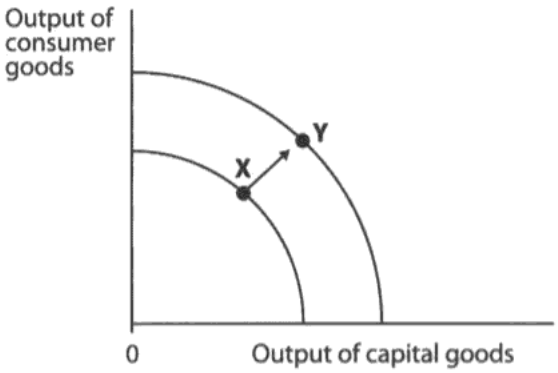
This question proved to be highly accessible and almost two-thirds of candidates achieved maximum marks.

This question proved to be highly accessible to the vast majority of candidates who achieved high marks.

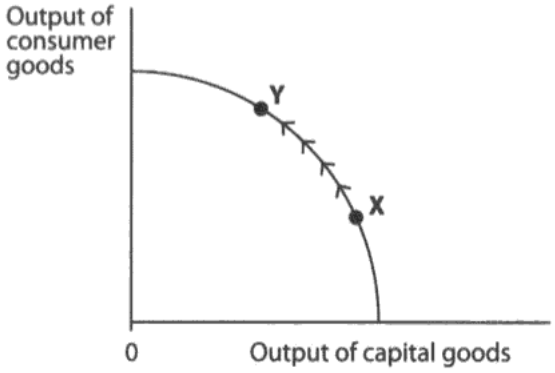
Option A



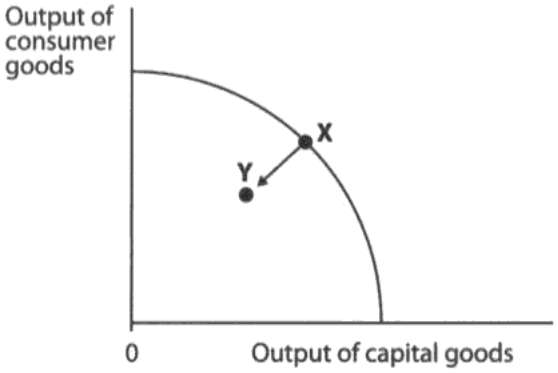
Option B



Option C



Option D



The diagrams show movements from position X to Y on production possibility frontiers. In which of the above diagrams does the movement from X to Y illustrate economic growth?

(1)

Answer B

Explanation

(3)

A PPF is a graphical representation showing the maximum potential level of output for 2 goods or services in an economy when all resources are fully employed, given the level

of technology available. Opportunity cost is the value of the next best alternative foregone. Economic growth is illustrated by an outwards shift in the PPF curve, this could be due to improves in technology. The answer cannot be D as this simply shows unemployment of resources at point Y.

ResultsPlus
Examiner Comments

This answer achieved 4 out of 4 marks.

Correct option B (1 mark).

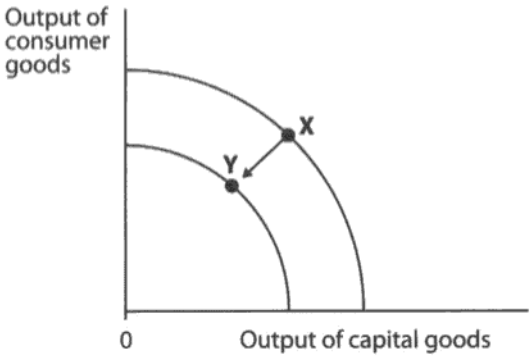
A definition of a production possibility frontier (1 mark) is supported with an explanation of what may cause an outward shift in such a curve - improved technology (1 mark).

Effective use of the rejection technique is offered to discount option D (1 mark). Note how the candidate adds value by indicating that at point Y there must be unemployment of resources.

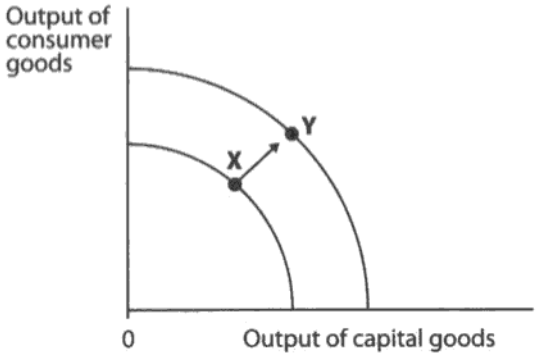
ResultsPlus
Examiner Tip

Always state the option key being knocked-out when using the rejection technique so that the examiner can identify what you are trying to do.

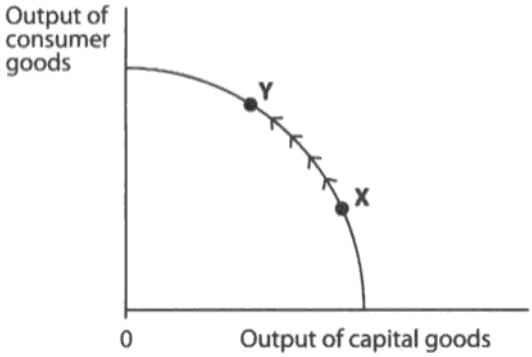
Option A



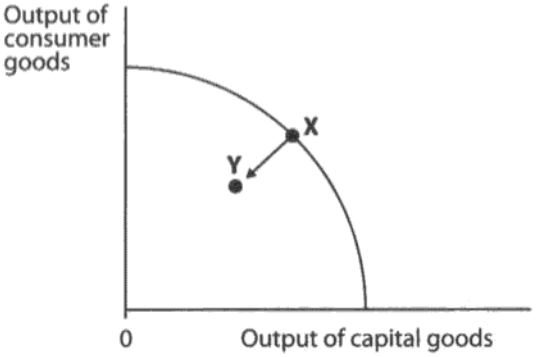
Option B



Option C



Option D



The diagrams show movements from position X to Y on production possibility frontiers. In which of the above diagrams does the movement from X to Y illustrate economic growth?

(1)

Answer: B

Explanation

(3)

the answer is B because the output of both capital goods and consumer goods have increased. Opp. cost is cost of the next best alternative forgone. the answer is not D because the decrease from x to y shows the decrease in the utilisation of resources.

ResultsPlus
Examiner Comments

This answer achieved 3 out of 4 marks.

Correct option B (1 mark).

Identification that there has been economic growth since output of both capital and consumer goods increased (1 mark). Rejection of option D since there is a decrease in the utilisation of resources in moving from X to Y (1 mark).

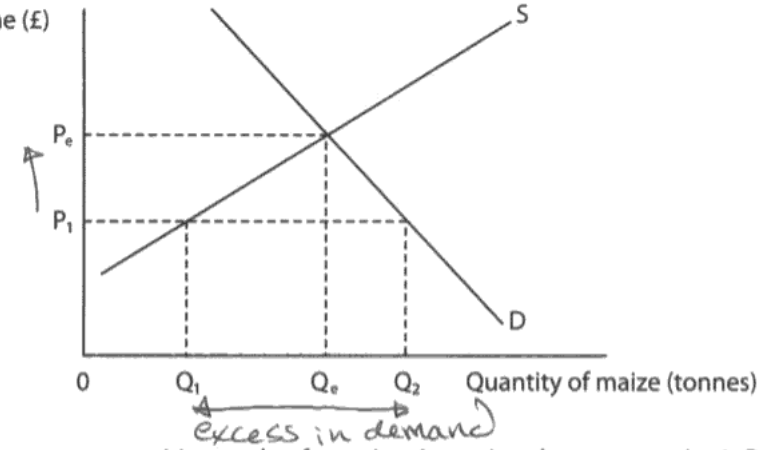
ResultsPlus
Examiner Tip

Define the key concept(s) in the question, namely, production possibility frontier and economic growth. This candidate missed the opportunity of gaining full marks.

Question 3

Just one-sixth of candidates achieved full marks. A significant number of candidates selected incorrect key 'A' and then proceeded to discuss the effects of a decrease in supply and price. Unfortunately, this type of response was not relevant to the question. It is important to carefully read the question instructions; it clearly states that the current price is at P1 in a competitive market and then asks candidates what is the most likely outcome. Relatively few candidates made the point that excess demand exists and so this is likely to put pressure on the price to rise towards market equilibrium.

3 Price per tonne (£)



The diagram shows a competitive market for maize. Assuming the current price is P_1, the mostly likely outcome is

(1)

A quantity supplied will fall

B demand curve will shift to the left

C price will rise

D quantities supplied and demanded will remain unchanged

Answer C

Explanation

(3)

→ Price will rise because there is an excess in demand of $Q_1 \rightarrow Q_2$ and therefore because of the law of supply and demand, the price will rise as a result of the shortage until price reaches the equilibrium price of P_e.

→ A is wrong because as price rises to Pe in the competitive market, the producers will supply more Q1→Q2 in effort to increase revenue.

→ B is wrong because the demand here is governed by price and shifts in D curve are always non price related

(Total for Question 3 = 4 marks)

ResultsPlus
Examiner Comments

This answer achieved 4 out of 4 marks.

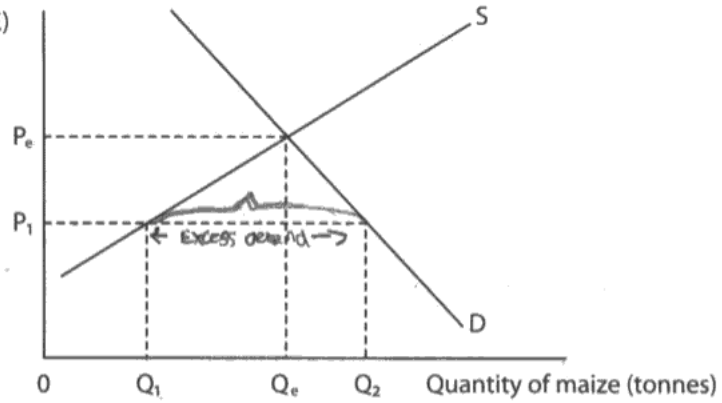
Correct response C (1 mark).

The candidate identifies an excess demand of Q1Q2 (1 mark) and then explains how the price mechanism will lead to a rise in price to market equilibrium Pe (1 mark). As the price rises so producers will supply more to increase revenue (1 mark). The latter point is put in the form of a rejection of option A - but either way it is worth a mark. Rejection of option B would also be credited with a mark here but full marks have already been achieved.

ResultsPlus
Examiner Tip

Always take time to carefully read the question. It is clear that the starting point is P1, where initially demand exceeds supply in the market and so it is in disequilibrium.

3 Price per tonne (£)



The diagram shows a competitive market for maize. Assuming the current price is P_1, the mostly likely outcome is

(1)

A quantity supplied will fall

B demand curve will shift to the left

C price will rise

D quantities supplied and demanded will remain unchanged

Answer C

Explanation

(3)

Price will increase from P_1 to PE, simply because at P1 there is excess demand. This is illustrated in the grag diagram above. If price increases to Pe this issue will be resolved as we can see Qe (the new output level) is the equilibrium point. The equilibrium point is where there is no tendency to change price or output levels as in presence of excess or shortages in demand and supply do not exist.

ResultsPlus
Examiner Comments

This answer achieved 3 out of 4 marks.

Correct option C (1 mark).

The response refers to price increasing from P1 to Pe because there is an excess demand (1+1 marks). This is shown in the diagram. To secure a further mark some explanation of the price mechanism is required, for example, supply extends and demand contracts as price rises.

Question 4

Two-thirds of candidates secured full marks by defining the concepts of price and income elasticity of demand and then offering some application of the data on air travel. There were a variety of ways to secure the marks.

4

UK elasticities of demand for air travel (2011 estimates)

Price elasticity of demand	–0.6
Income elasticity of demand	+1.3

(Source: © Crown Copyright)

It may be deduced from the data in the table that

(1)

A air travel is a normal good and demand for it is price inelastic

B a decrease in the price of air travel will increase total revenue

C air travel is an inferior good and demand for it is price elastic

D an increase in income will cause the price of air travel to fall

Answer [A]

Explanation

(3)

$Ped = \frac{\%\Delta QD}{\%\Delta P}$ $Yed = \frac{\%\Delta QD}{\%\Delta Y}$

Air travel can be seen as a normal good as it has a positive Yed. This means that as income increases, demand increases also. The demand for air travel can be seen as being inelastic as $-0.6 < 1$. This means that $\%\Delta QD < \%\Delta P$

C is incorrect as if air travel was an inferior good it would have a negative Yed

ResultsPlus
Examiner Comments

This answer achieved 4 out of 4 marks.

Correct option A (1 mark).

The answer begins with formulae for price elasticity of demand and income elasticity of demand (1+1 marks). Then data is used to explain that demand is price inelastic since it is -0.6, so the percentage change in demand is less than the percentage change in price (1 mark). For good measure the candidate then proceeds to reject option C (1 mark). Note a maximum of three explanation marks available.

ResultsPlus
Examiner Tip

It is acceptable to offer formulae as definitions of the different types of elasticity when answering supported multiple choice questions. However, do make sure the formulae are precise - all too often candidates miss out a letter or forget the '%' sign.

4

UK elasticities of demand for air travel (2011 estimates)

Price elasticity of demand	−0.6
Income elasticity of demand	+1.3

(Source: © Crown Copyright)

It may be deduced from the data in the table that

(1)

A air travel is a normal good and demand for it is price inelastic

B a decrease in the price of air travel will increase total revenue

C air travel is an inferior good and demand for it is price elastic

D an increase in income will cause the price of air travel to fall

Answer B

Explanation

(3)

Price elasticity of demand shows the responsiveness of demand for air travel to a change in its price. Income elasticity of demand shows the responsiveness of demand for air travel to a change in income. According to the data there is a positive elastic income elasticity for air travel. This means that a decrease in the price of air travel would cause another increase in demand for air travel as it is an inferior good, moreover increasing total revenue.

ResultsPlus
Examiner Comments

This answer achieved 2 out of 4 marks.

Incorrect option B (0 mark).

The candidate successfully defines price and income elasticity of demand (1+1 marks) but then becomes confused in the application to the data on air travel.

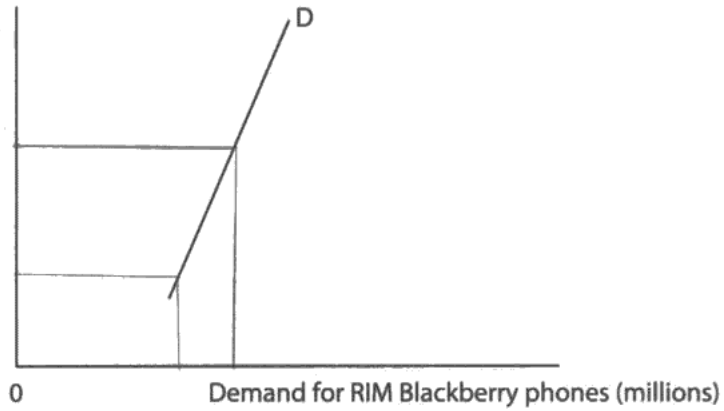
ResultsPlus
Examiner Tip

Practise answering the supported choice multiple questions with use of the data. Here, the candidate is unable to use the data and so the answer becomes confused.

Question 5

Almost half of all candidates achieved full marks. This involved a definition of cross elasticity of demand, recognition that substitutes have a positive relationship followed by explicit application to the two types of mobile phones. A significant number of responses successfully offered rejection techniques to support their case.

5



The diagram shows the relationship between the **price** of the Apple iPhone and the **demand** for the RIM Blackberry phone. It can be deduced from the diagram that these two goods

(1)

A are price elastic in demand

B have a negative cross elasticity of demand

C have a zero cross elasticity of demand

D are substitutes for each other

Answer D

Explanation

(3)

Cross elasticity of demand is the responsiveness of a change in quantity demanded for blackberry phones due to a change in price for Iphones.
They are substitutes and therefore ~~for~~ have a positive cross elasticity of demand.
As price of iphones increase, demand for blackberry rises.
cannot be B as complements have a negative cross elasticity

(Total for Question 5 = 4 marks)

ResultsPlus
Examiner Comments

This answer achieved 4 out of 4 marks.

Correct option D (1 mark).

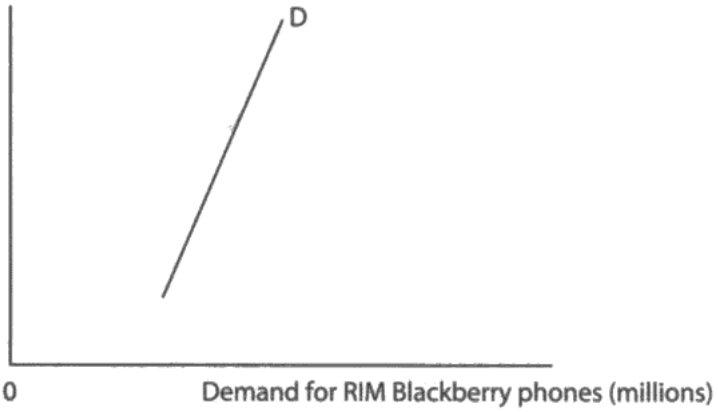
A definition of cross elasticity of demand (1 mark) is supported with the idea that substitutes have a positive XED (1 mark); explicit application to iPhones and Blackberry phones is then made (1 mark). Finally, a simple but highly effective rejection of option B is carried out (1 mark). Note that a maximum of three explanation marks is available.

ResultsPlus
Examiner Tip

Always add value when offering a rejection comment. In this case the candidate clearly identifies that 'B' is incorrect since complementary goods have a negative cross elasticity of demand.

However, if the rejection was something like 'B is wrong since substitutes do not have a negative cross elasticity of demand' - then no mark would be awarded.

5



The diagram shows the relationship between the **price** of the Apple iPhone and the **demand** for the RIM Blackberry phone. It can be deduced from the diagram that these two goods

(1)

A are price elastic in demand

B have a negative cross elasticity of demand

C have a zero cross elasticity of demand

D are substitutes for each other

Answer D

Explanation

(3)

XED = %ΔQd (B) / %ΔP (A)

A substitute is that good which can be changed for another good due to its price or fashion.

When the price of Apple iPhone increases the demand for RIm Blackberry increases.

Cross elasticity of demand is the responsiveness of the change in demand of one good to the change in price of another.

ResultsPlus
Examiner Comments

This answer achieved 3 out of 4 marks

Correct option D (1 mark).

The formula or definition of cross elasticity of demand (1 mark) is supported with application, namely, as the price of Apple iPhone increases the demand for RIM Blackberry increases (1 mark).

ResultsPlus
Examiner Tip

Always consider where the three explanation marks are coming from. In this case another point is required to gain full marks. Furthermore, there is no need to offer both the formula and definition of XED here since only one mark is available.

Question 6

This was a question in which many candidates confused the determinants of price elasticity of supply with those of price elasticity of demand. Consequently, just a quarter of candidates gained full marks. Note that a 'high' elasticity means elastic and a 'low' elasticity means inelastic.

6 With reference to the reason provided, which of the following is most likely to have a high price elasticity of supply?

(1)

A IT Technicians, because there is a high demand for their services

B New houses, because they take a long time to build

C Wheat, because large stockpiles are available

D Organic vegetables, because they have close substitutes

Answer C

Explanation

(3)

Price elasticity of supply: A measure of the sensitivity of quantity supplied to a change in price.

'/. change in quantity supplied of wheat

'/. change in price of wheat.

If the value is above one, this indicates that they have an elastic price elasticity of supply ie. a '/. change in price will cause a larger '/. change in quantity supplied.

A factor affecting this is the amount of stock available. ie. if the price increases then supply can increase easily as the good is available in large quantities being stored, thus can be easily released in the market.

Answer B is wrong since, New houses, taking a long time to build will have an inelastic price elasticity of supply ie. a % change in price will cause a smaller % change in quantity supplied as even if price increases, houses can't be build + ready immediately thus are inelastic in supply.

(Total for Question 6 = 4 marks)

ResultsPlus
Examiner Comments

This answer achieved 4 out of 4 marks

Correct option C (1 mark).

A definition of price elasticity of supply is supported with a clear explanation of the meaning of elastic supply (1+1 marks). Application to wheat is offered (if price increases, supply can increase easily due to the large quantities being stored that can be released on to the market) (1 mark).

Rejection of option B concerning the supply of new houses is offered with reference to the time period and price inelasticity (1 mark). Note a maximum of three explanation marks is available.

ResultsPlus
Examiner Tip

Offer some application to question at hand. The best responses recognised that large stockpiles of wheat mean the commodity can easily be released on to the market and so is price elastic in supply.

6 With reference to the reason provided, which of the following is most likely to have a high price elasticity of supply?

(1)

A IT Technicians, because there is a high demand for their services

B New houses, because they take a long time to build

C Wheat, because large stockpiles are available

D Organic vegetables, because they have close substitutes

Answer C

Explanation

(3)

Price elasticity of supply is $\frac{\%\Delta Qs}{\%\Delta P}$

~~As there is a high demand for IT technicians~~

A is incorrect as it would have a low, inelastic PES. As large stockpiles of wheat are available, the change in quantity supplied can be made immediately after a change in price.

ResultsPlus
Examiner Comments

This answer achieved 3 out of 4 marks.

Correct option C (1 mark).

The formula of price elasticity of supply (1 mark) is supported with application to the large stockpile of wheat available (1 mark).

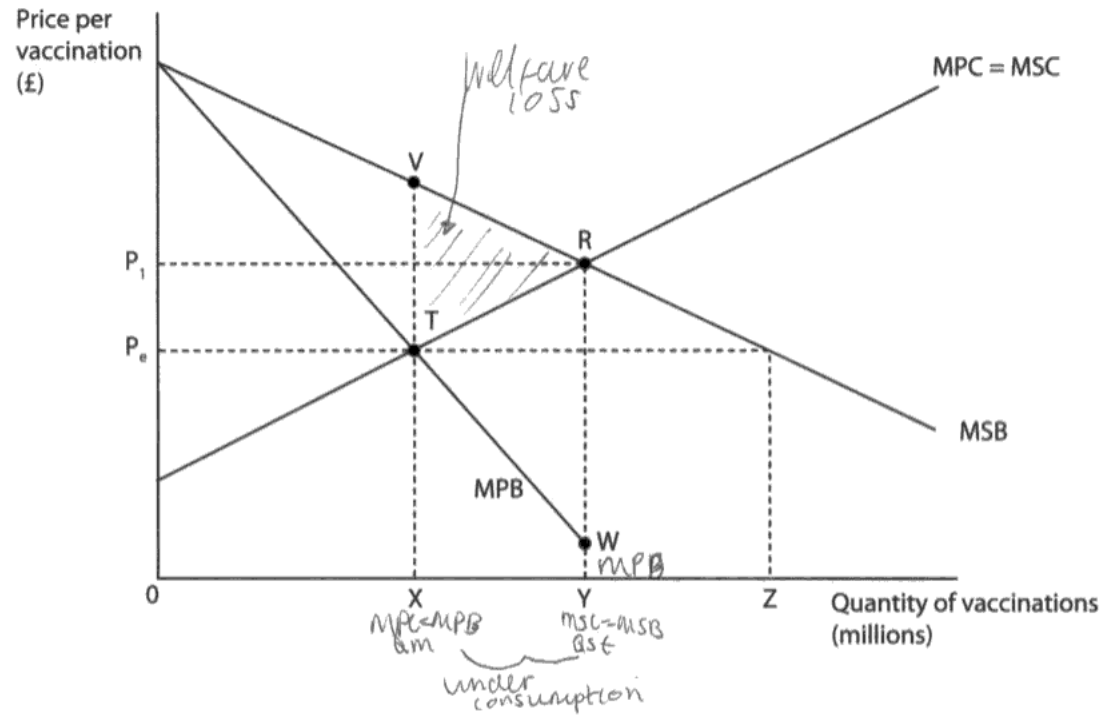
ResultsPlus
Examiner Tip

The attempt to reject option 'A' is too limited. The candidate needs to explain why IT technicians typically have a low elasticity of supply, namely, because of the long time required to train them up in the skills required.

Question 7

This was a familiar question which offered candidates the opportunity to score marks by annotating the externality diagram provided. Common mistakes that many responses suffered from was to define external costs and discuss government failure - despite the question being concerned with external benefits from vaccinations and market failure. Furthermore, some candidates mislabelled the triangle of welfare gain or welfare loss as the triangle of 'externalities'. Less than a third secured full marks.

7 **Market for vaccinations**



The diagram shows a free market for vaccinations in which the current equilibrium level of output is X and price P_e. At this level of output there is

(1)

A an external cost

B market failure

C an excess supply

D government failure

Answer B

Explanation

(3)

Market failure is where the price mechanism does not allocate resources efficiently. The market failure here is an underconsumption of a positive externality. This is an external benefit which is an advantage to the third party (those not involved in the transaction) and are not taken into account by the price mechanism. Vaccinations are a positive externality as they prevent illness' being passed on therefore by having a vaccination you are benefitting the third party. D is incorrect as there is no government intervention as this diagram is showing a free market

ResultsPlus

Examiner Comments

This answer achieved 4 out of 4 marks.

Correct option B (1 mark).

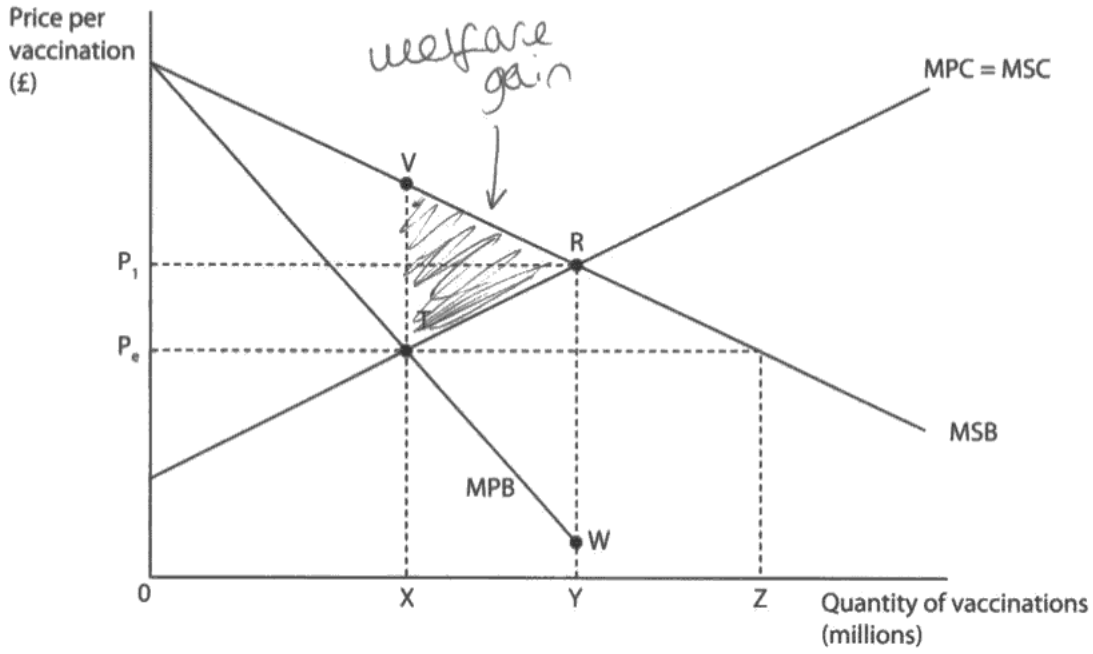
The definitions of market failure and external benefits secured 1+1 marks. The answer then outlines a typical external benefit from vaccinations (prevent illnesses being passed on) (1 mark). Rejection of option D is also accepted here (1 mark). Note a maximum of three explanation marks is available.

ResultsPlus

Examiner Tip

Always offer some application to the market at hand, for example, explain a typical external benefit from the vaccination market.

7 **Market for vaccinations**



The diagram shows a free market for vaccinations in which the current equilibrium level of output is X and price P_e. At this level of output there is

(1)

A an external cost ✗

B market failure ✗

C an excess supply

D government failure

Answer [D]

Explanation

(3)

The vaccinations cause positive externality because they give benefit to a third party — someone who wasn't the producer or consumer.
Vaccinations give positive externalities because if the consumer of the vaccination doesn't get the disease they're now protected against, they aren't spreading it to others or ~~being~~ needing to use hospital services.

If the quantity of vaccinations was X, it would present government failure because there are given a small amount of vaccines that they do not benefit society only the consumer of the vaccination.

ResultsPlus
Examiner Comments

This answer achieved 3 out of 4 marks.

Incorrect option D (0 mark).

A definition of positive externalities (1 mark) is supported with application to the vaccination market (1 mark). Annotation of the diagram to show the triangle of welfare loss also scores (1 mark).

ResultsPlus
Examiner Tip

Read the question carefully - it mentions a free market for vaccinations, so there is no government intervention and so no reason to select option D. The question is about market failure not government failure.

Question 8

The quality of responses were significantly improved compared to previous attempts at answering questions on this topic. Almost half of candidates achieved full marks. The very best answers offered relevant diagrammatic analysis depicting the quantities of stock purchased and released onto the wheat market by an agency. The common mistakes included confusing the minimum and maximum price lines and also just repeating the correct key without adding value to the answer.

8 The operation of a buffer stock scheme for wheat means that

(1)

- ✓ **A** stocks are released onto the market when there is a surplus of wheat
- ✗ **B** the price of wheat cannot rise above the minimum price set
- ✓ **C** stock levels are increased following a shortage of wheat
- **D** stocks are used to reduce price fluctuations of wheat

Answer D

Explanation

(3)

A buffer stock ~~stock~~ stock scheme is a form of government intervention to prevent market failure. It is when the government sets a minimum and maximum price for a good and if there is excess supply the government buys it up and keeps it in a stockpile until there is supply shortage of the good then they will sell it. A is incorrect because when there is surplus of wheat the government buys up the wheat and does not sell it. The awnser is not C because following a wheat shortage stock piles/levels will reduce due to having sold them in the wheat market. The awnser is not B because the government sets a minimum and maximum price level, meaning the price can rise above the minimum level as long as its below the maximum price level.

(Total for Question 8 = 4 marks)

ResultsPlus
Examiner Comments

This answer achieved 4 out of 4 marks.

Correct response D (1 mark).

Identification of a maximum and minimum price band (1 mark) is linked to the government purchasing stock when there is an excess supply and adding to its stockpile, only to release it when there is a shortage (1+1 marks). Rejection marks would also be credited here.

ResultsPlus
Examiner Tip

A good example of how to reject option B is shown (1 mark). The other two rejection examples are also just about sufficiently developed to warrant marks.

8 The operation of a buffer stock scheme for wheat means that

(1)

A stocks are released onto the market when there is a surplus of wheat

B the price of wheat cannot rise above the minimum price set

C stock levels are increased following a shortage of wheat

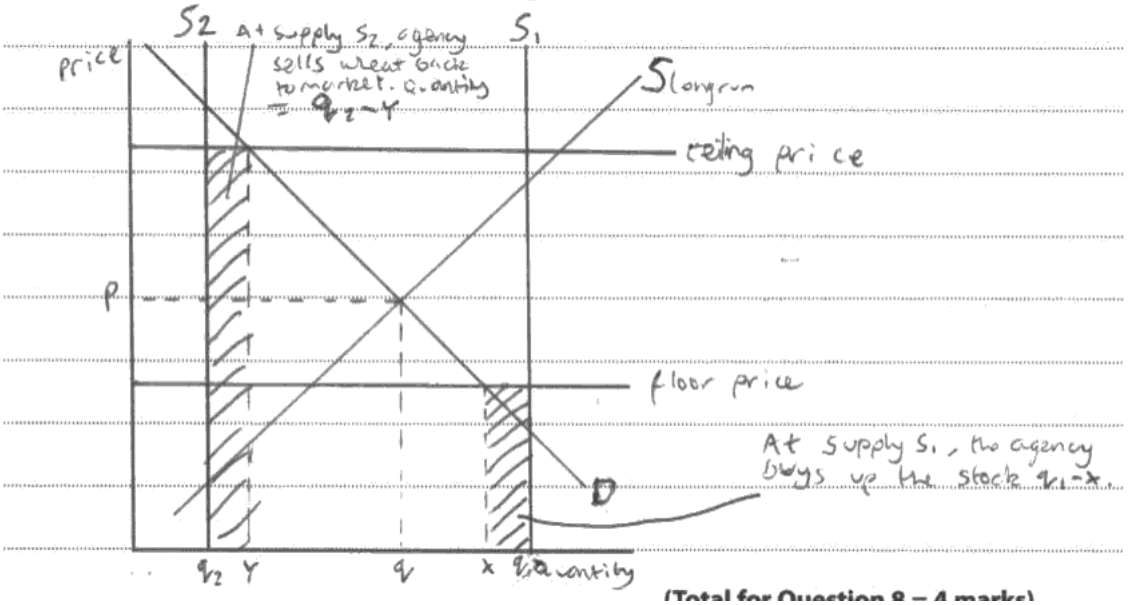
D stocks are used to reduce price fluctuations of wheat

Answer **D**

Explanation

(3)

A buffer stock scheme for wheat is when a government agency buys/sells sets a floor price and ceiling price and if there is a surplus of wheat, the agency will buy up the excess wheat at the floor price. And then if there is ever a shortage of wheat the government agency will sell the wheat back onto the market at the ceiling price.



(Total for Question 8 = 4 marks)

ResultsPlus
Examiner Comments

This answer achieved 4 out of 4 marks.

Correct option D (1 mark).

This is a high quality answer showing how diagrammatic analysis can gain full marks! (The ceiling and floor prices / areas of agency spending / selling) (1+1+1 marks).

ResultsPlus
Examiner Tip

Be prepared to offer diagrammatic analysis. Marks are always awarded when relevant to the question set.

Question 9 (a)

Most candidates understood that mackerel fish stocks were being consumed at a rate that made them unsustainable. However, not many responses referred to sustainability in terms of a resource that would be available for future generations at current rates of consumption.

(a) With reference to Extract 1, outline the meaning of the term *sustainable resource* (line 5).

(4)

A sustainable resource is a resource that can be used in such a way that it will still be around for future generations to use. A sustainable resource will not just run out the world can keep it going for the future generations. In this case ~~mackerel~~ the number of mackerel that have been caught have increased by 50%. This increase is so high that it may no longer be sustainable because there are not enough fish to reproduce and replace caught stocks.

ResultsPlus
Examiner Comments

This answer achieved 4 out of 4 marks.

The candidate explains the meaning of sustainable resource (the idea of consuming it at a rate which will ensure it is still available for future generations) (2 marks). Application is then offered to mackerel fishing where the rate of consumption exceeds the rate at which the fish can reproduce and so is no longer sustainable (2 marks). Good use is made of the extract information.

ResultsPlus
Examiner Tip

Follow the instructions in the question, that is, refer to Extract 1. This is required to gain the application marks available.

(a) With reference to Extract 1, outline the meaning of the term *sustainable resource* (line 5).

(4)

A sustainable resource is resource that can be used in a way that it can be used now and in the far future. This means that if your are care full with the resource it can still be used for many years to come

ResultsPlus
Examiner Comments

This answer achieved 2 out of 4 marks.

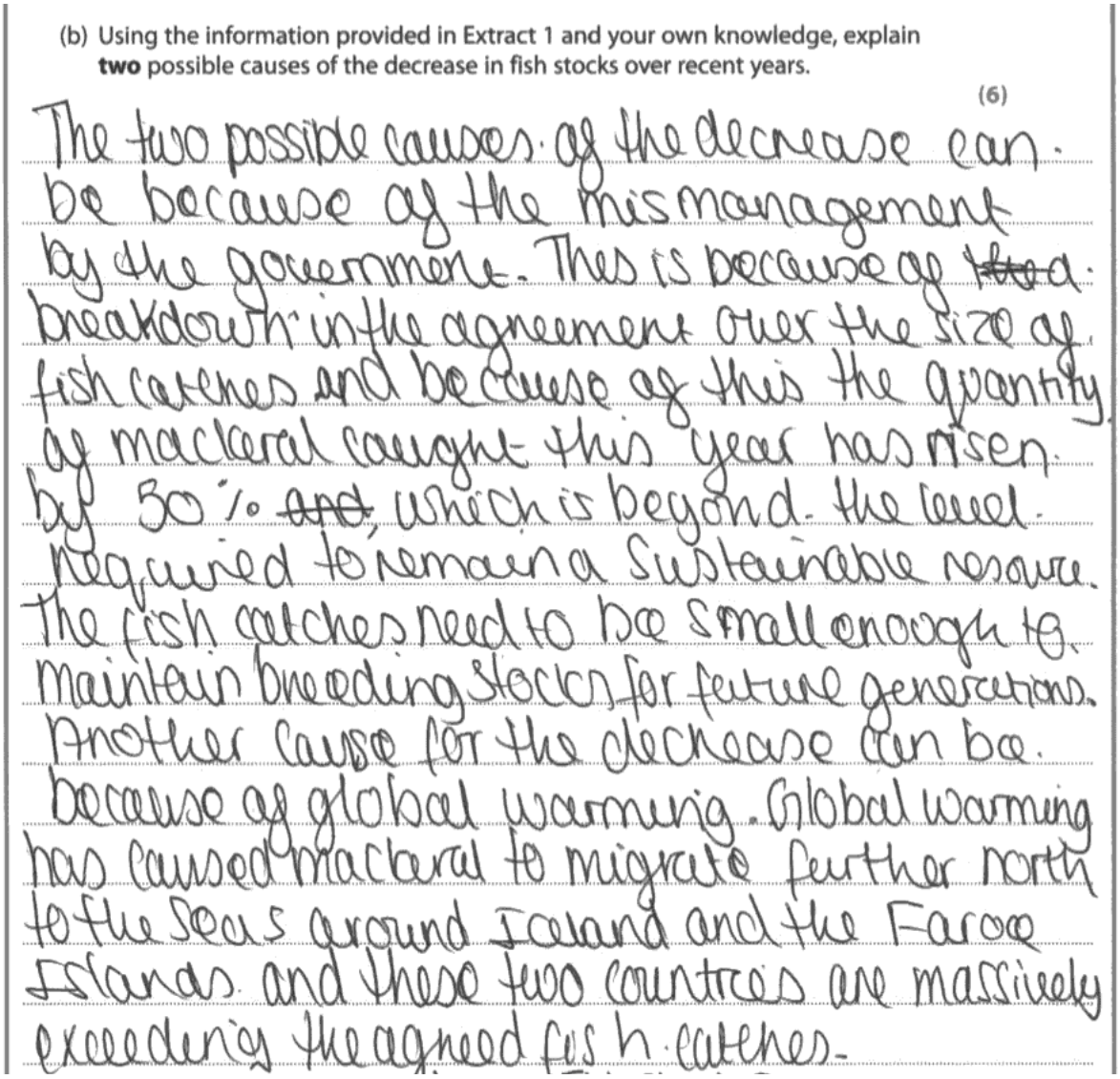
The meaning of the term sustainable resource is explained but no reference is made to mackerel fishing.

ResultsPlus
Examiner Tip

Make use of the information provided as instructed by the question. It is a way of gaining the application marks available.

Question 9 (b)

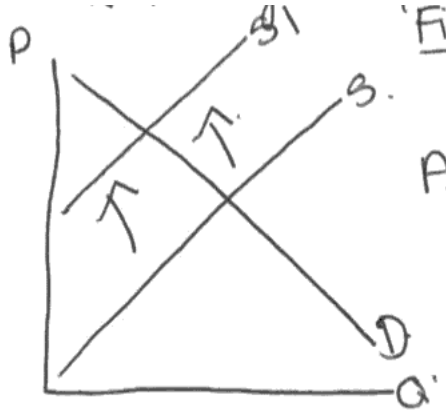
Most responses used global warming as one reason for declining fish stocks but failed to expand upon this sufficiently. Quite often the two reasons were bundled into one point which made it hard to distinguish between them. Relatively few answers offered diagrammatic analysis such as a decrease in supply or an increase in demand for fish.



(b) Using the information provided in Extract 1 and your own knowledge, explain **two** possible causes of the decrease in fish stocks over recent years.

(6)

The two possible causes of the decrease can be because of the mismanagement by the government. This is because of ~~the~~ a breakdown in the agreement over the size of fish catches and because of this the quantity of mackeral caught this year has risen by 30% ~~and~~, which is beyond the level required to remain a sustainable resource. The fish catches need to be small enough to maintain breeding stocks for future generations. Another cause for the decrease can be because of global warming. Global warming has caused mackeral to migrate further north to the seas around Iceland and the Faroe Islands and these two countries are massively exceeding the agreed fish catches.



Fish stocks.

A shift in the fish stocks because of a decrease in the stocks of fish.

ResultsPlus
Examiner Comments

This answer achieved 6 out of 6 marks.

The first cause of the decrease in fish stocks is mismanagement by government (1 mark) which is developed by referring to the breakdown of the quota agreement and fish catches increasing by 50% - beyond the level of a sustainable resource (2 marks).

The second cause is global warming (1 mark) which is developed by explaining how the fish have migrated northwards into the path of countries over-fishing. It is rounded off with effective use of a demand and supply diagram (2 marks).

ResultsPlus
Examiner Tip

Be prepared to offer diagrammatic analysis when relevant.

(b) Using the information provided in Extract 1 and your own knowledge, explain **two** possible causes of the decrease in fish stocks over recent years.

(6)

One cause is that global warming has caused fishes such as mackarel to migrate north to countries such as Iceland. These countries are then catching more fish than agreed. They catch 150,000 tonnes and the limit is 100,000. Once they have caught the fish they use it for things er such as fertiliser, wasting it. This will decrease fish stocks because there will not be enough fishes because of to breed more. Also, EU quota systems, more than over 30% of fish catches have to be thrown back into sea as fishing boats are not allowed to sell more than their allowances or they will be fined. Most of these fish when thrown back may be dead and no use to anyone. No one else can catch them and they cannot breed to make more, causing stock piles to decrease.

ResultsPlus
Examiner Comments

This answer achieved 6 out of 6 marks.

The first cause of declining fish stocks is referred to as global warming (1 mark) which is developed to include the fish migrating northwards to countries exceeding their fish quotas and even using the fish as fertiliser (2 marks).

The second cause is the EU quota system (1 mark) which is developed to explain how 30% of fish catches are thrown back dead and cause the stock levels to decrease without any tangible benefit (2 marks).

ResultsPlus
Examiner Tip

Always answer the question set and offer two causes of the decrease in fish stocks over recent years. Make these two points clear and then use the information and your own knowledge to develop them where possible.

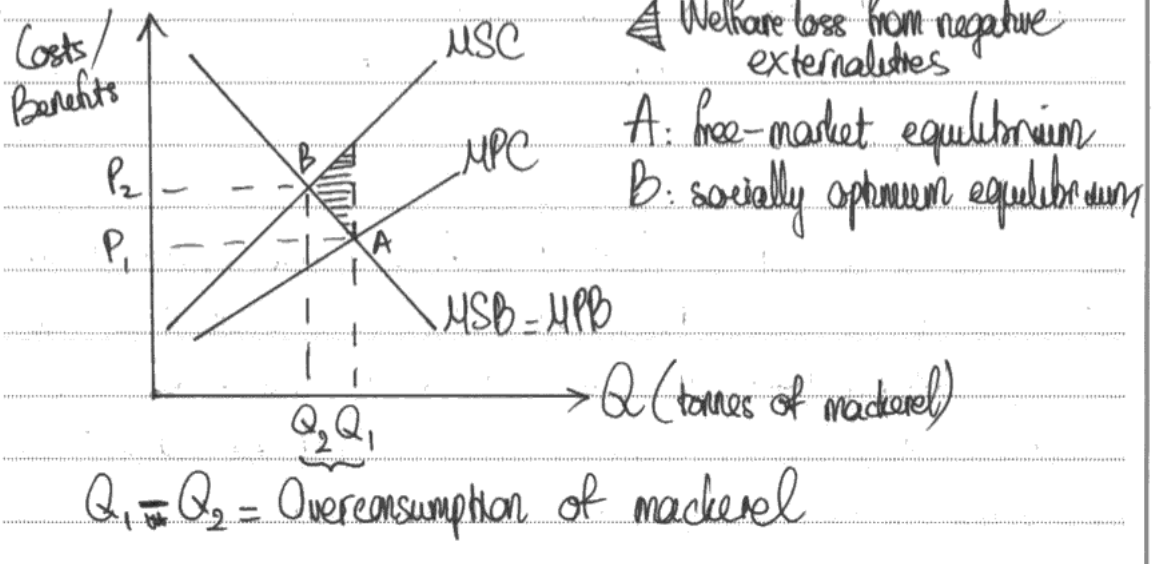
Question 9 (c)

Over recent exam series there have been significant improvements to candidate answers that require an externality diagram. It was pleasing to see this trend continue in the current series with the external cost diagram applied to the context of mackerel fishing.

However, many candidates confused the external costs from over-fishing with private costs. Also, evaluation tended to be limited and responses often strayed from the question by discussing solutions to over-fishing such as fish farms. This was relevant to Q9(e) but not Q9(c).

*(c) Examine the likely external costs from over-fishing of mackerel. Use an appropriate diagram in your answer. (14)

External costs are costs to the 3rd party, those not directly involved in market transaction.
External cost = Social cost − Private cost.



Q1 = Q2 = Overconsumption of mackerel

Overfishing of mackerel has many external cost. Firstly, the future generations (3rd party) may not be able to fish the mackerel ~~to~~ so it represents a loss in income and employment. They also cannot enjoy the taste of mackerel in terms of food ~~as well as to~~. Over-fishing also lose the balance of nature since if mackerel disappears, so do many links ~~on~~ in the food chain which depend on them. Bio-diversity will be damaged, thus seriously affected the ~~eco~~ tourism industry and ~~scientists~~ researchers (3rd party)

However, fishing mackerel may significantly bring many benefits to the society. There could be a huge source of income and employment for Icelandic fishing industries As supply of ~~fish~~ mackerel are plentiful in the market, price of mackerel will fall, benefiting the low income households, reducing income inequality. Hence, benefits may outweight the external cost.

~~However, the question of whether over-fishing generating~~ However, with significant external cost, there will be government intervention to correct market failure of over-consumption of mackerel. ~~Ex~~ (not ceteris paribus) The extract 2 suggests the UK government prevents all fishing in 30% of UK's coastal waters and EU fish quotas means that ~~fishers~~ fishermans may face severe fines which may be used to fund subsidies to development of fish farms and internalising external cost & reduce welfare loss

However, there is asymmetric information - ~~a market~~ another market failure. It is very difficult to identify, quantify and attach a monetary value to external cost such as negative impact on biodiversity since it is intangible. Hence, the UK government and the EU may find it hard to find the correct value of welfare loss triangle.

ResultsPlus
Examiner Comments

This answer achieved 12 out of 14 marks.

The extended definition of external costs (1+1 marks) is supported with relevant diagrammatic analysis (4 marks). The external costs from over-fishing is then explained in terms of the impact on the food chain and loss of bio-diversity (2 marks).

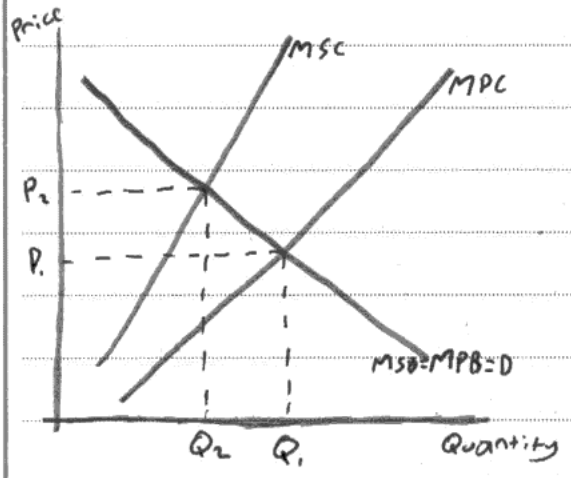
Evaluation is then offered by discussing possible benefits of over-fishing (2 marks) and the difficulty of quantifying and attaching a monetary value to the external costs involved (2 marks). It is a good answer which lacked one more evaluation point for example, discussion of the accuracy of the official data on fish stocks and fish catches.

ResultsPlus
Examiner Tip

Try and maintain relevance throughout and consider offering three evaluation points for 14 mark-base questions.

*(c) Examine the likely external costs from over-fishing of mackerel. Use an appropriate diagram in your answer.

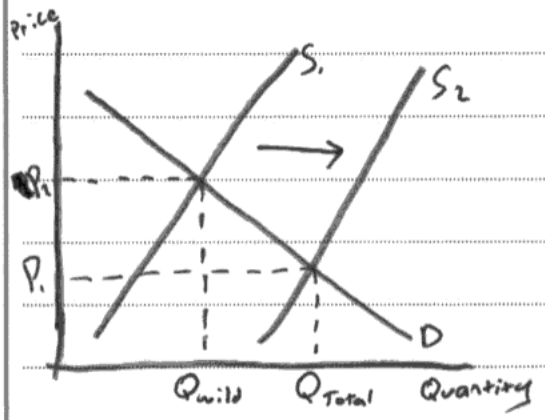
(14)



The main external cost of over-fishing of mackerel is that it will make mackerel an unsustainable resource. The market will naturally produce at the point Q_1, as that's where MPC = MPB. However, as mentioned in extract 2, this is likely to lead to the extinction of mackerel. The best point to produce at for society, is at Q_2 as that's where MSC = MSB. This means that too much mackerel is being fished. Government could help to fix this by putting a tax on the production of mackerel in order to reduce supply. They could also start advertising campaigns in order to reduce demand for mackerel.

As extract 2 suggests, Government could also invest in trying to increase the number of fish farms. This would mean that less

will mackerel would have to be fished and would lead to a reduction in external costs.



However, it is possible that fish farms would just add to the amount of mackerel supplied. A shift from S_1 to S_2 would cause an increase in quantity from Q_{wild} to Q_{total}. However, fish farms may only produce the difference between Q_{total} and Q_{wild}, the rest would then still be caught in the sea and the externalities would not be reduced.

ResultsPlus
Examiner Comments

This answer achieved 4 out of 14 marks.

The answer starts with a promising diagram and this scores 3 marks (need to identify the area of welfare loss to gain the extra mark). The answer also implies that over fishing will mean mackerel stocks are unsustainable and so represent an external cost (1 mark). The rest of the answer then considers solutions to over-fishing, but unfortunately this is not relevant to the question set.

ResultsPlus
Examiner Tip

Focus on the question set. It is a good idea to read all five questions before starting to answer the first - since it offers a perspective on what is required overall. It is easier to focus on the question set rather than answer what is required elsewhere.

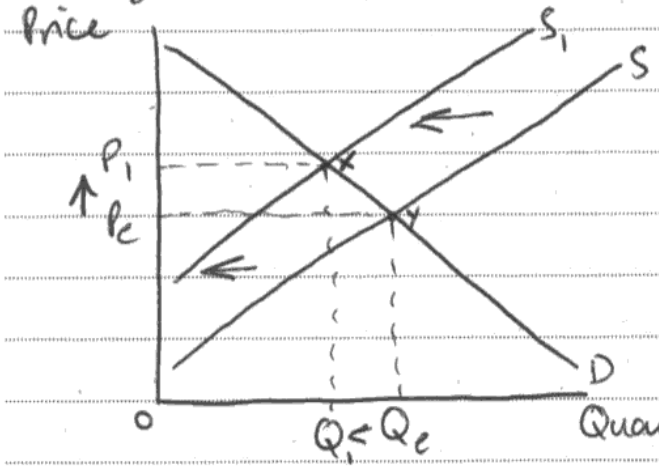
Question 9 (d)

Overall this question was well answered with many focusing on the potential benefits from the government preventing fishing in 30% of UK coastal waters. The best responses considered both the positive and negative economic effects over time.

(d) With reference to Extract 2, discuss the likely economic impact if the UK government prevents fishing in 30% of the UK's coastal waters.

(10)

According to a Royal Commission of Environmental pollution they reccomend that the goverment prevents fishing in 30% of the UK's costal waters. This would allow places for fish to reproduce safely and greatly increasing the size of fish stocks.
Furthermore it would ensure the survival of many fish types such as Macherel.
The reduction in the number of sources to obtain fish from would see a fall in the supply curve.



This would see a rise in the price of fish as a whole and a reduction in the quantity. We can also see that consumer surplus is reduced by P_1P_eXY.
However, fish are free to swim wherever they want and there is nothing the UK goverment can do if they do not

remain in the UK's costal waters.

The magnitude of the fishing prevention in 30% of the UK's costal waters is a significant proportion of the UK's waters. This should see fish stocks increase rapidly.

There may be government failure in the sense that due to the increase in price of fish, it may be worthwhile for some fishermen to illegally fish the banned areas to make extra money. If this occurs these fisherman will not record the number of extra fish caught and perhaps ~~not~~ evade paying tax on the profits they make. It is likely black markets could occur. This could put the whole plan of protecting 30% of costal waters, at risk.

Also it takes extra money to make sure that no-one fishes in the restricted waters. This money could be spent elsewhere such as on education/healthcare (high benefits), so has an opportunity cost.

ResultsPlus
Examiner Comments

This answer achieved 10 out of 10 marks.

The candidate offers good economic analysis on the likely economic effects to achieve the full 6 KAA marks, for example, a decrease in fish catches, higher fish prices and a fall in consumer surplus - all supported by a relevant diagram (4 marks). By doing this it means fish stocks can recover in the long term, especially since some 30% of the waters are protected (2 marks).

Evaluation comes in the form of considering the problems raised by the fishing ban, namely that fish may swim into waters where there is no protection, the danger of illegal fishing and the costs involved in policing the waters. These ideas are sufficiently developed to award 2+2 marks. Overall it is a well balanced answer.

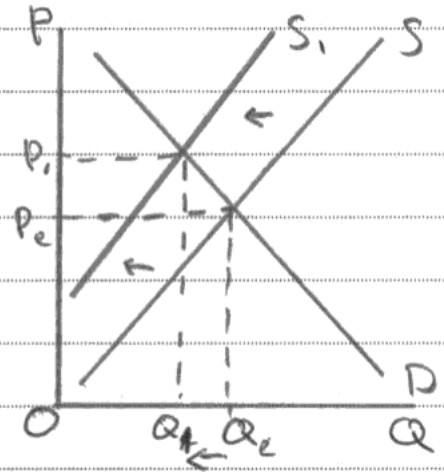
ResultsPlus
Examiner Tip

Offer economic analysis in your answer - it makes sense to use a demand and supply diagram to demonstrate the likely economic effects of such fishing restrictions.

(d) With reference to Extract 2, discuss the likely economic impact if the UK government prevents fishing in 30% of the UK's coastal waters.

(10)

In Extract 2 it says that a Royal commission for on Environmental pollution ~~recomends~~ recommends that in 30% of the UK coastal waters fishing is prevented. This will as the extract says allow fish to reproduce safely. However this means that the supply of fish will decrease causing a rise in price. As the below diagram illustrates.



This also affects labour as people will be out of a job as fishing, raising unemployment. Meaning the government have to pay out either through training for new jobs or benefits. Training so that there is mobility

of labour. It could also increase the demand for other meats such as chicken, as it is a substitute for fish.

ResultsPlus
Examiner Comments

This answer achieved 6 out of 10 marks

The candidate offers good economic analysis on the likely economic effects to achieve 6 marks, for example, a decrease in the supply of fish and an increase in price, supported by a relevant diagram (3 marks). Some recognition is made that fish can reproduce safely from protecting 30% of the coastal waters (1 mark). Attention is then drawn to the impact on jobs in the fishing industry (1 mark) and how it might lead to an increase in demand for substitutes such as meat and chicken (1 mark). The answer needs some evaluative comments on whether the fishing exclusion zone would work.

ResultsPlus
Examiner Tip

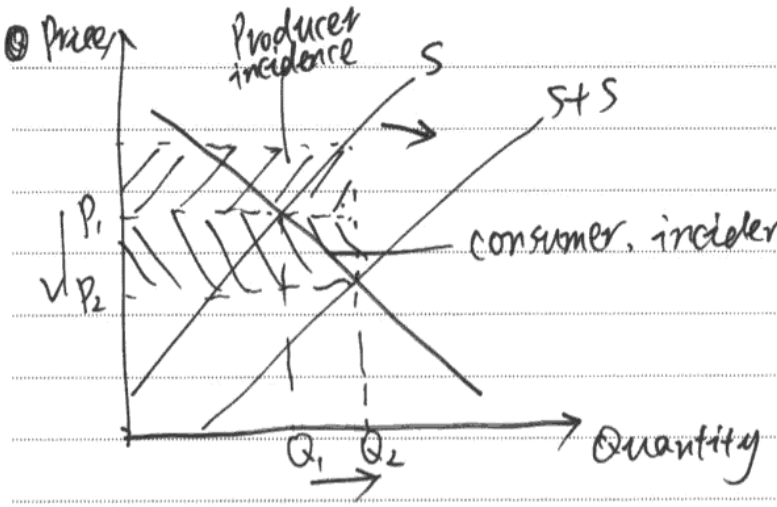
Consider both the positive and negative effects of government measures to develop a balanced approach to answers.

Question 9 (e)

This was well answered overall and most responses included a relevant subsidy diagram and evaluative comments. Considerable differentiation in the quality of answers occurred. The weakest responses drew the subsidy diagram incorrectly or made no attempt at offering one.

*(e) Evaluate the use of government subsidies to fish farms. Use an appropriate diagram in your answer.

(14)



Subsidy is the government grant given to producers to encourage output. This will reduce the cost of production, therefore fish farms are willing to produce more.

Firstly, this will increase producer surplus which is the difference between the producers are willing to sell the goods at and the price they are actually selling. If fish farms have more producer surplus, they have more incentive to innovate and invest to expand. ~~Their firms.~~ For example, they can promote the technology of preventing fishes escaping.

Second, it can reduce unemployment. Since there are more fish farms, supply of they have to employ more ~~fee~~ workers. This create a large number of job opportunities for fishers and farmers. in remote communities.

At the same time, it relieved ~~the~~ pressure ~~from~~ wild fish stocks. More production of fishes will ~~sut~~ prevent people over-fishing the fishes in the sea which protect the environment.

However, fish farming does have its cities. For example, diseases spread rapidly in ~~overpolluted~~ ~~over-polluted~~ overpopulated fish farms and the local wild fish population can be contaminated. It is very risky ~~to~~ and might lead to bankrupt. Furthermore, when large numbers ~~eg~~ escape from farms, this affects the overall gene pool. Therefore the food chain is destroyed and the pool cannot maintain. At the same time, the tastes ~~of~~ of fishes from fish farms might be worse. Consumers will prefer

to buy the fishes from the sea. Therefore the fish farming may not have enough demand. ~~For the~~ At the same time, it takes time for fishes to grow up and the subsidy imposed on farms may not affect immediately. Government can use the subsidy elsewhere for education, which means there is a or National health ~~long~~ opportunity cost.

ResultsPlus
Examiner Comments

This answer achieved 14 out of 14 marks.

A definition of a subsidy (1 mark) is supported with a relevant diagram (3 marks) and explanation of how it acts to reduce production costs for fish farms (1 mark). The benefits are then considered, for example, it encourages more innovation and investment, the creation of employment in remote communities and the protection of wild fish stocks (4 marks). All 8 KAA marks are gained.

Evaluation comes in the form of discussing the possible impact on wild fish stocks and the gene pool if farmed fish escape (2 marks); also the quality and taste of farmed fish is discussed (2 marks); finally the issue of opportunity cost of the government subsidy to fish farms is developed (2 marks).

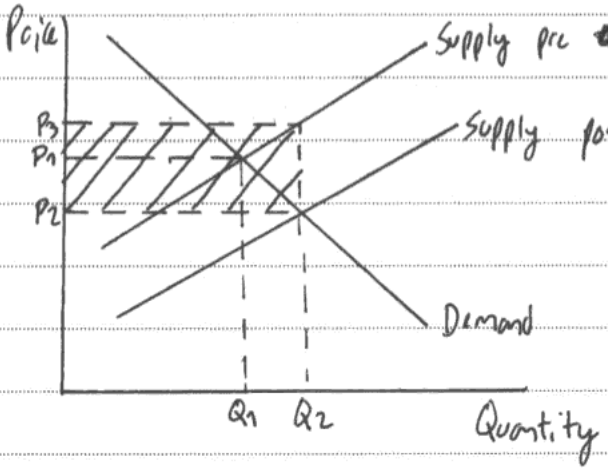
ResultsPlus
Examiner Tip

Always complete diagrams accurately. In this case the candidate has labelled most of the curves and axes correctly as well as highlighting the area of government subsidy and overall impact on price and quantity. The omission of labelling the demand curve could have cost the candidate a mark. In this case plenty of KAA marks have already been secured!

*(e) Evaluate the use of government subsidies to fish farms. Use an appropriate diagram in your answer.

(14)

A subsidy is a grant provided by the government to businesses, so that the price is reduced and the quantity increases



the diagram shows how a subsidy reduces prices and increases the quantity, as the suply curve experiences an outward shift due to the money firms are granted, as it reduces their costs of production. the size of the subsidy is shown by the shaded area.

the fact that the government subsidises fish farms means that there price of fish for the consumers is less. this also means that like they spend less on fish they have more disposable income and can therefore have a better quality of life.

However fish farms may relly on the subsidy and become dipendant.
Also subsidies mean a huge cost and they have a great opportunity cost, which is the forgone benefit from not consuming the next best thing

The government spends larges amounts of money on subsidies and therefore they can use that money in education or the health service.

As well as this taxes may increase due to the subsidies as the government spending increases.

Also the money spent to subsidise ~~the~~ fish farms may be drawn away from other important sectors, such as education or buffer stock schemes.

On the other hand the subsidise means more businesses are encouraged to enter the fish farms businesses and the external costs of directly fishing from the sea may soon itself reduced.

ResultsPlus
Examiner Comments

This answer achieved 10 out of 14 marks.

A definition of a subsidy (1 mark) is supported with a relevant diagram (3 marks) and explanation of how it acts to reduce production costs for fish farms (1 mark). Further analysis comes in the final paragraph where the subsidy might encourage more businesses to enter the industry and reduce the external costs of over fishing the wild stocks (2 marks). Evaluation marks are secured by brief reference to making fish farmers dependent on the subsidy (1 mark) and opportunity cost of the subsidy to government (2 marks).

ResultsPlus
Examiner Tip

Try and develop the points made. For example, the candidate could have gained more marks by developing the point about fish farmers becoming dependent on the subsidy. Exploration of how production costs could increase, productivity decrease and inefficiency set in comes to mind here.

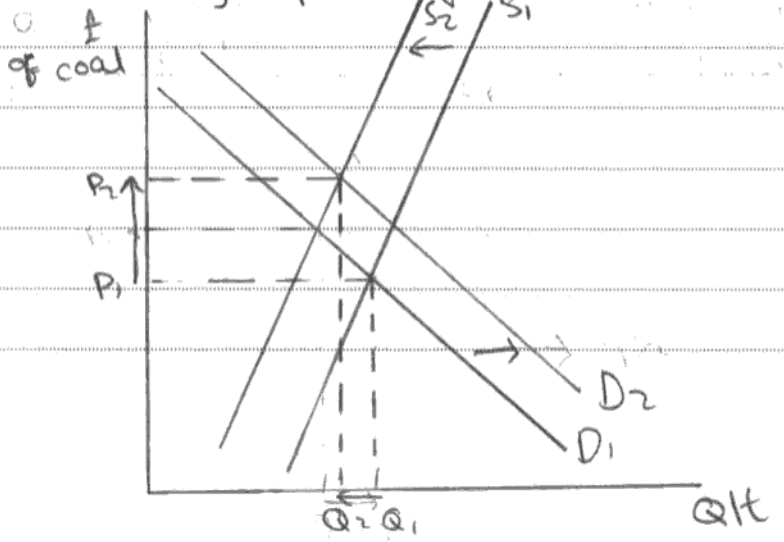
Question 10 (a)

This is a frequently asked question that tests candidate knowledge, understanding and application of the price mechanism model from the extract information. It was pleasing to report that the vast majority of responses offered a suitable diagram and explanation. Nearly three-quarters achieved four or more marks out of the six marks available. The main limitation was in those answers which only shifted the supply curve and failed to shift the demand curve.

(a) With reference to Figure 1 and the first paragraph in Extract 1, outline the causes of the increase in Australian coal prices in January 2011. Illustrate your answer with a demand and supply diagram.

(6)

The price for coal increased by "35% per tonne" by January 2011. This was caused by the "severe floods" indicated in extract 1. This would destroy coal mines and means of transportation for the coal, shifting the ~~demand~~ supply curve to the left, increasing price. Also, "speculative buying" as refered to in line 6 would increase the demand, also increasing price further.



ResultsPlus
Examiner Comments

This answer achieved 6 out of 6 marks.

A fully labelled diagram depicts a decrease in supply and an increase in demand with the original and final new price equilibrium positions (4 marks). The reason for the decrease in supply (1 mark) and increase in demand (1 mark) is also offered. Finally, explicit use of the price data shown on the first two lines of the answer is undertaken (1 mark). Note a maximum of 6 marks is available.

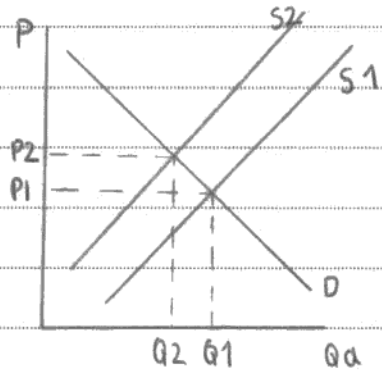
ResultsPlus
Examiner Tip

Always label the axes and curves in diagrams. Make explicit use of the price data in Figure 1 as instructed.

(a) With reference to Figure 1 and the first paragraph in Extract 1, outline the causes of the increase in Australian coal prices in January 2011. Illustrate your answer with a demand and supply diagram.

(6)

The price of coal has increased up to 357. per tonne from November 2010 to January 2011.



As the diagram shows, an inwards shift in the supply curve would cause an ~~inward~~ increase in price and so a decrease in demand.

Supply has decreased because of the floods which has damaged many coal mines and the railway links to transport it.

We have also seen an inwards shift in the supply curve because the cost of production has increased as the cost of pumping out the water and repairing the mines would be very expensive.

ResultsPlus
Examiner Comments

This answer achieved 4 out of 6 marks.

Explicit reference to price data (1 mark) is supported with the reason for the decrease in supply (floods which has damaged coal mines and railway lines) (1 mark). The diagram gains 2 marks (the original demand and supply with original equilibrium price / a decrease in the supply curve).

ResultsPlus
Examiner Tip

Be prepared to spend sufficient time on the extract to explore whether there are further reasons for the change in price of a commodity. In this case, candidates are given help through the instruction to look at one specific paragraph!

Question 10 (b)

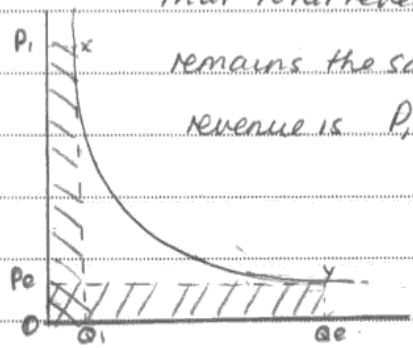
This question was poorly answered and explains why the overall average score for data response Q10 was slightly lower than for data response Q9.

The vast majority of responses incorrectly assumed that demand for coal is price inelastic if an increase in its price leads to the same level of total revenue. Consequently most candidates achieved just one mark for defining the concept price elasticity of demand.

(b) What does the evidence in the second paragraph of Extract 1 suggest about the price elasticity of demand for Australian coal? Explain your answer.

(4)

PED is the measure of responsiveness in quantity demanded when there is a change in price. ~~This suggests that PED is unitary elastic.~~ Extract 1 says that ~~it~~ even though there is higher prices and reduced output the revenue of firms have remained the same. This suggest that PED is unitary elastic. This means that total revenue (Price x quantity of output) remains the same. For example at ~~P~~ P_1 the revenue is $P_1 \times Q_1 O$ and is equal to the revenue area at the price level $P_e = P_e \times Q_e O$



ResultsPlus
Examiner Comments

This answer achieved 4 out of 4 marks.

A definition of price elasticity of demand (1 mark) is supported with identifying that it is unitary elastic since total revenue remains the same (1+1 marks).

A valid diagram is offered depicting equal total revenue areas following the price change (2 marks). Note a maximum of 4 marks is available.

ResultsPlus
Examiner Tip

Ensure a thorough understanding of the relationship between price elasticity of demand and total revenue. Be prepared to offer diagrammatic analysis to support your answer.

(b) What does the evidence in the second paragraph of Extract 1 suggest about the price elasticity of demand for Australian coal? Explain your answer.

(4)

The second paragraph of Extract one states that despite the high price and reduced output their revenue has stayed the same. This suggests that the price elasticity of demand for Australian coal is unit elastic as change in ~~demand~~ price and output has had no effect on their revenue generated.

ResultsPlus
Examiner Comments

This answer achieved 2 out of 4 marks.

The candidate states that price elasticity of demand is unit elastic and so the change in price has no effect on total revenue (1+1 marks).

ResultsPlus
Examiner Tip

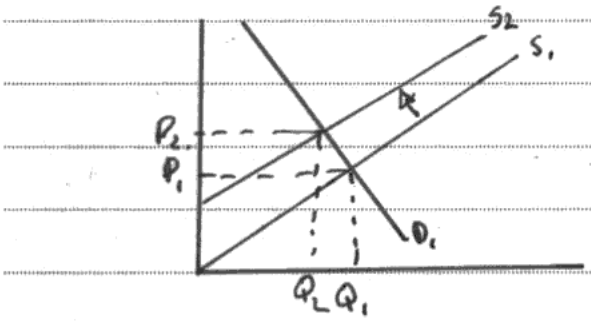
Be prepared to extend the answer, for example, by explaining the meaning of unit elastic demand (the percentage change in demand is the same as the percentage change in price).

Question 10 (c)

This was quite a challenging question since candidates were required to maintain focus on the impact of higher Australian coal prices on UK electricity prices. Many responses wandered away from the question by discussing the general effects of higher UK electricity prices on the economy. Since the question was very specific it made sense to combine the KAA and evaluation marks into a whole entity rather than breaking them down. This made it easier for candidates to score marks. Even so, the mean mark was still less than half the marks available.

(c) Examine the likely economic effects of an increase in Australian coal prices on UK electricity prices.

(10)



As referring # to the extract, The UK generates about one quarter of its electricity by burning coal which is imported overseas. Thus, the likely economic effects on electricity prices is that they will increase as an increase in coal will result in an increase in production costs for electricity providers. However, because electricity is an essential good service, the PED is likely to be inelastic so electricity providers may/will be able to pass the extra costs on to the consumers. On the other hand, electricity providers may look elsewhere overseas in search for cheaper coal providers and thus, ~~should~~ the price of electricity may not increase. P.s well as this, the price of coal may be relatively high in the long short run but decrease in the long run so the price of electricity may not rise as producers swallow the extra costs for a short period of time. Electricity providers may not raise the price as they cut costs elsewhere; for example redundancies or using profits from previous years to make up for the costs. Also, the carbon, providers the UK

may invest in the means of producing electricity, for example wind energy or renewable energy. As the extract states, that only electricity produced is from burning coal for one quarter of the coal is imported overseas; it is, unlikely to have a drastic effect as they could source coal elsewhere or invest in other means of producing coal as they seem to have done already. As the price of ~~elasticity~~ electricity increases, consumers are likely to look elsewhere for providers with cheaper prices and this improve the firms competitiveness. Also, this does not apply to consumers of renewable energy.

ResultsPlus
Examiner Comments

This answer achieved 10 out of 10 marks.

The candidate starts with a data reference on the UK generating about a quarter of its electricity by importing coal from overseas. Then s/he considers the likely effects of higher coal prices (recognising it as a cost of production) to the electricity generating firms. This is supported with a diagram (3 marks).

Much economic analysis and evaluation is offered, for example, discussion of price elasticity of demand (2 marks), short run and long run differences in coal prices (1 mark), investment into alternative energy sources (1 mark), the possible use of coal from elsewhere rather than Australia (1 mark) and whether electricity firms could actually absorb the higher production costs or cut production costs elsewhere and so not change price (2 marks). There are clearly lots of relevant points made which maintain focus on UK electricity prices!

Note an attempt has been made to break down the individual marks too but often this approach loses the 'gestalt' or overview of the answer. Clearly, this response is of a high quality and merits full marks.

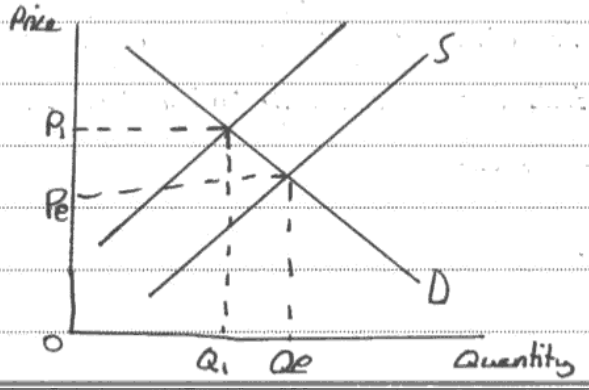
ResultsPlus
Examiner Tip

Read the question instructions carefully in order to maintain focus - namely, how an increase in Australian coal prices might affect UK electricity prices. Far too many responses wandered off the point and discussed the general effects of higher electricity prices on the UK economy.

(c) Examine the likely economic effects of an increase in Australian coal prices on UK electricity prices.

(10)

Coal is used to generate electricity in the UK. If coal prices increase, this will cause an increase in the price of electricity as it will increase the production cost of electricity.



An increase in production costs will cause an inward shift of the supply curve. This causes the equilibrium price to increase from Pe to P1.
The effects of electricity prices increasing in the UK could be an increase in overall inflation, due to most businesses using electricity their production costs will increase and so prices will rise.

The magnitude of the increase in electricity prices depends on how much coal the UK imports from Australia. If most of the UK's coal is from Australia then electricity prices will increase much more than if a lot of the coal comes from other countries. However, the does depend on how other countries coal prices are affected by Australian coal output.

In the long run this increase in coal prices may not have such a large effect on electricity in the UK, as the levels of coal available are likely to increase again after the floods have cleared. In the short run however, prices are likely

to increase by a sizeable amount, especially as demand for electricity is price inelastic, so producers can increase price and revenue. I think this is the most important factor in electricity prices increasing due to coal.

ResultsPlus
Examiner Comments

This answer achieved 8 out of 10 marks.

Higher coal prices will increase production costs for electricity firms and so lead to higher electricity prices - this is supported with a diagram (3 marks). Discussion of the amount of coal imported from Australia then made (2 marks).

This is followed by discussion of possible short run and long run effects in the final paragraph (3 marks). The Australian floods may clear and so coal prices fall back to normal levels - suggesting electricity prices might not rise much at all. Also demand for electricity is price inelastic so firms can simply increase price and revenues.

Question 10 (d)

This was the first time a question had been set on tradable permits in the data response section of the paper. The quality of answers varied enormously from well-informed, coherent arguments that considered both the benefits and limitations, to very weak responses which had little idea of the meaning of tradable pollution permits. One common mistake was for candidates to misinterpret the question and concentrate on the benefits of a reduction in carbon emissions rather than the effectiveness of a system of tradable pollution permits to reduce carbon emissions. Many answers also offered an externality diagram but did not show the impact of such permits on the market.

*(d) With reference to Extract 2 and your own knowledge, assess the benefits of a system of tradable pollution permits for reducing carbon emissions.

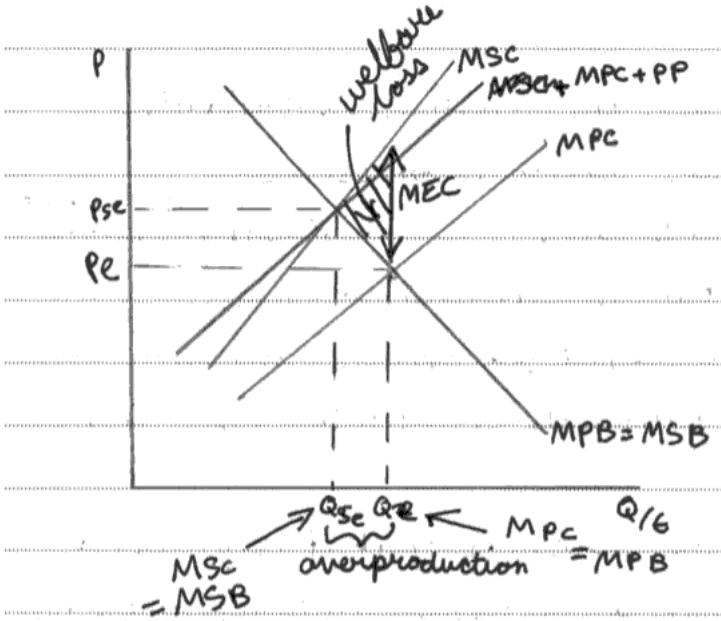
(14)

Pollution permits reduce the negative externalities caused by firms e.g. carbon emmissions. (Ex 2, line 4) As Australia accounts for 1.5% of global greenhouse gas emissions it would be beneficial to have tradable pollution permits to reduce carbon emissions. This internalises the externalities by making the producer pay.

An advantage of the system is that it requires no intervention from the government. Pollution permits are traded between firms. Those who produce less carbon emissions are able to sell off their permits in order to make a profit. Australia's biggest polluting companies have an incentive to cut carbon emissions to make a profit.

However, the system may not cut reduce carbon emissions as firms are able to with higher profit margins are able to buy up pollution permits and continue to produce ex negative externalities. This causes ~~and~~ smaller firms to benefit less from the scheme.

Furthermore, it is difficult to calculate the amount of permits needed to reach the socially efficient equilibrium. This is because it is difficult to put a monetary value on the external costs caused by carbon emissions.



The pollution permits must equal the marginal social costs.

⊗

However, the successfulness of the scheme may depend upon global aggreements made. If other countries choose not to operate using the system then Australia may lose its international competitiveness due to an increase in costs.

(8) The government may use town revenue generated from pollution permits to reduce the effect of carbon emissions e.g. increase spending on health care. Sufferers of an illness due to carbon emissions can receive treatment.

ResultsPlus
Examiner Comments

This answer achieved 14 out of 14 marks.

The 8 KAA marks are gained by: data use from the extract of how important Australia is in terms of global emissions (1 mark), how the permits can internalise external costs of pollution (1 mark), explaining the benefits of tradable permits, for example, creation of a market with incentives for firms to reduce carbon emissions in order to sell their spare permits and make a profit (2 marks), diagrammatic analysis depicting a shift in marginal private costs towards marginal social costs (assuming firms have to pay for the permits) (2 marks), possible benefits to the government from selling some of the pollution permits (2 marks).

Evaluation is revealed in the discussion on the limitations, for example: problems calculating the amount of permits needed to reach a socially efficient equilibrium (2 marks), the possibility that firms with high profit margins can simply buy up spare permits rather than cut back on pollution (2 marks) and consideration of the scheme in relation to the absence of global agreements and its impact on Australian industry's competitiveness (2 marks).

ResultsPlus
Examiner Tip

For the 14 mark base questions, try and develop three evaluative comments.

*(d) With reference to Extract 2 and your own knowledge, assess the benefits of a system of tradable pollution permits for reducing carbon emissions.

(14)

Tradable pollution permits were first introduced in Europe. They give certain amount or limites to the industries to pollute the environment and if they need more they can buy from other companies who might have surplus or unused permits. So it uses market mechanism to internalise the external cost of producing the goods and the funds raised buy governments buy selling the permits could be used to save the environment or compensate victims. Due the limitation of in polluting the environment firms are encorage to introduce new ways and techiques which will help them not to exceed their limite and buy ~~or~~ other permits. TPP scheme is a flexible scheme created in way that business can be easily adjusted with, like they are able to bank their excess permits and use later, so ~~bus~~ it consider business interest a lot.

However, Calculating pollution or damage to environment is an ~~e~~ inexact Science so it is difficult to monitor the System and involves a great administrative cost. Also the argument of issuing too much permites even has rose in europe before. ~~In aust~~ In of Australia the companies receives 94.5% carbon permits which might not have great impact on the

carbon emission and to invest in clean techonology. The problem is farther worser by the Australian government subsidising other 5.5%. So their won't ~~be any~~ much change or investments in clean techonology. The subsidy could be used somewhere elese even. As we all know their are other countries who exports coal to world market and they do not have this scheme which means the cost of production of Australian firms will be higher then other and the prices too. So the demand will eventually decrease and a Australian government will face problems with employments. Even it is stated in extract 2 that 40000 jobs are directly in at risk and further 100,000 jobs indirectly.

ResultsPlus

Examiner Comments

This answer achieved 14 out of 14 marks.

Another high quality answer where all 8 KAA marks are just about gained: an explanation of carbon permits (2 marks) is supported with advantages such as internalising external costs through the funds raised by government being used to clean up or pay compensation to victims (2 marks); an incentive for firms to reduce their pollution and use new techniques in production - moreover, firms can bank their excess permits for use later and it is a highly flexible scheme (up to 4 marks).

The evaluation is very good and comes in the form of problems in monitoring the pollution emissions (2 marks), issues surrounding the granting of 94.5% of permits free to firms (2 marks) and the possibility that Australian firms may become less competitive since it is not a global scheme (2 marks).

ResultsPlus

Examiner Tip

Try and extend the economic analysis in large mark base questions - all too often it is too brief and lacking in points. This response only just scrapes the 8 KAA marks. Discussion of how the scheme could be extended to countries in South east Asia or how dirty polluting firms are put at a competitive disadvantage compared to cleaner firms would have helped here.

Question 10 (e)

This was another question which differentiated effectively in the quality of answers. They ranged from a sophisticated analysis and evaluation of government training programmes and relocation subsidies through to very basic answers which just repeated points in the extract. One fairly common mistake involved confusing mobility with immobility of labour. Another common error involved discussing mobility of labour with no reference to coal mining.

*(e) Discuss **two** possible government measures to **improve** the mobility of labour in the coal mining industry.

(14)

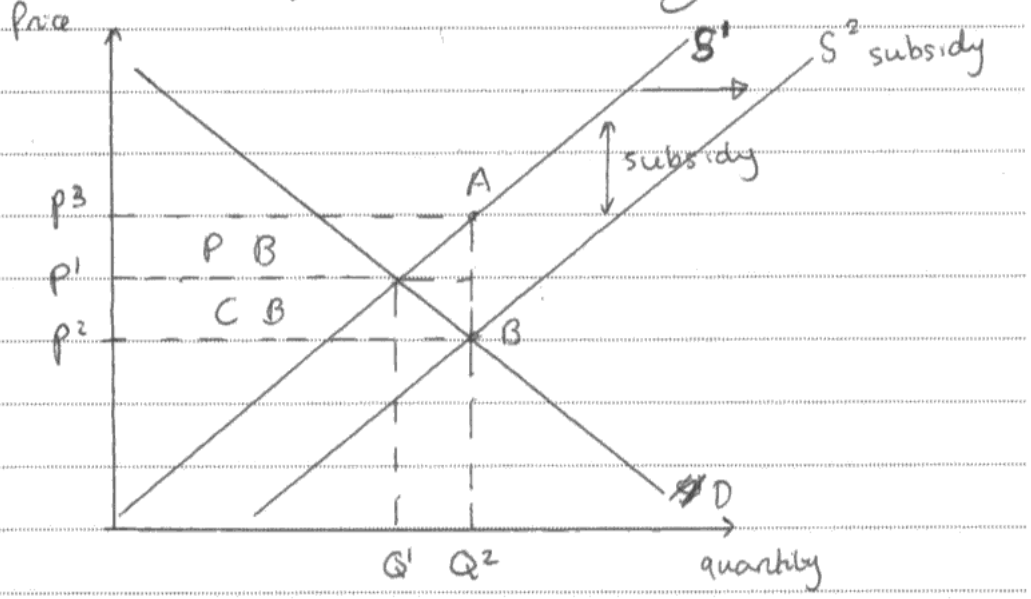
Immobility of Labour comes ~~fall~~ in two forms. Occupational immobility means that workers do not have the required skill set and Human Capital for a job.

Geographical immobility is where the people who are seeking jobs are not in the same geographical location as the jobs.

Government training programmes would mean that the occupational mobility of labour would increase. This is because Human Capital of the workforce would improve. Because the skills of workers in the coal mining industry are not transferrable to other industries, these training programs would need to be quite ~~so~~ extensive. There is an opportunity cost here because the government would not be able to spend as much on healthcare / education. If there are no jobs in the car production industry available, then training programs in car manufacture would not be beneficial, so jobs that are available should be the orientation of the training. Division of Labour would reduce training costs. The programs would need to provide skills that are

appropriate for the level of the workers, for example medical courses may not be appropriate. Increasing occupational mobility of Labour would be pointless however if there are no other jobs available.

Relocation subsidies would mean that workers would be able to move to where the jobs are present, reducing the Geographic immobility of Labour. Housing subsidies may be appropriate:



Total government expenditure is area P_2P_3AB. Price is reduced from P^1 to P^2, meaning there is an insentive to move to where jobs are available, increasing geographical mobility of Labour.

These subsidies from the government however have an opportunity cost, because there will be less government expenditure on healthcare / educate.

Workers may not want to relocate because of family and friends in the area they currently are in. This would mean it would be more effective to increase occupational mobility of labour. Subsidies may cost more for housing than training programs.

Increasing occupational mobility of labour may also have positive macro economic effect, because the skill could be used to increase net society welfare.

ResultsPlus
Examiner Comments

This answer achieved 14 out of 14 marks.

Definitions of occupational and geographical immobility of labour are initially made (1+1 marks). An explanation of Government training programmes to increase occupational mobility of labour is then developed (with reference to skills in coal mining not being transferable) (2 marks). This is followed by several evaluative comments concerning opportunity cost, their suitability for coal miners and whether there are jobs available on completion (5 marks)

On the second page the focus switches to relocation subsidies as a measure to increase geographical mobility of labour. Housing subsidies are investigated with the use of a diagram and how they work (1+3 marks). Evaluation is then undertaken by suggesting that workers may not want to relocate because of family and friends (1 mark).

Overall, the answer just about warrants full marks.

ResultsPlus
Examiner Tip

Be prepared to apply to the context. This candidate is quite lucid in exploring the effectiveness of training programmes for coal miners.

*(e) Discuss **two** possible government measures to **improve** the mobility of labour in the coal mining industry.

(14)

Labour mobility is ~~the~~ how easy it is to move from one job to another. There are two types of labour mobility, occupational and geographical. Occupational mobility is how easy it is for workers to move from one type of occupation another, this is mainly down to the range of skills the person has. Occaptional immobile workers would find it hard to move from one place to another because they lack skills. Geographical immobility is where workers are unable to move from one region to another for a job, this may be due to family ties, income etc. Labour ~~im~~ mobility may be improved by providing training programmes. Training programmes help coal miners who may became unemployed gain more skills to enable them to change jobs helping improve their occupational mobility. Because coal miners are normally specialised they only have a specific amount of skills to fit their current jobs. Coal mining might have a divisin of labour where labour is divided up so people do certain jobs, this can be demotivating and competitive, however it can get the job done quicker making the workforce more productive. Training courses will allow coal miners to ~~date~~ develop more skills to allow them to ~~new~~ get other jobs by making them

less specialised. The government could also ~~subsidise~~ give relocation subsidies. A subsidy is a grant given by the government to increase production or consumption of a good or service. Relocation subsidies will help improve the mobility of labour because it will give money to help the unemployed or those needing to move from one ~~place~~ workplace to another be able to afford to move. This will increase their geographical mobility as they can move ~~without being having~~ having less money concerns. Because coal miners aren't ~~at~~ on high incomes moving location (to a different region) for a job might not be possible because they might not be able to afford it and will therefore be ~~im~~ geographically immobile. The subsidy will help them be able to afford to relocate in order to get another job.

However training courses will cost the government a lot of money. The opportunity cost (the sacrifice of the next best alternative) may be high because the amount of government revenue paid by tax payers if spent on training courses it doesn't allow them to spend that on other things such as education or health care. There is also an opportunity cost for subsidising to relocate workers. The money spent on them won't be able to be spent on other things. ~~Also~~ ~~Have~~ Also will the

subsidy and ~~training~~ training courses benefit the economy? ~~With the amount of~~ The amount of training may not be enough for the workers to be able to work in other places as it may cause government failure because the skills haven't allowed them to get new jobs. Also the size of the subsidy may not help some coal miners relocate because it might not be enough for those on the lowest income. The subsidy may not encourage people to relocate because they might have family ties in their current location which may prevent them to move. If ~~this is common and not~~ not being able to relocate is common the the productivity of the economy may decrease, this will lead to an increase in unemployment and possibly more people seeking benefits.

ResultsPlus
Examiner Comments

This answer achieved 12 out of 14 marks.

Up to 6 KAA marks are gained by explaining occupational and geographical mobility of labour and the use of training programmes and relocation subsidies to improve them.

The maximum 6 evaluation marks are gained by discussing the opportunity cost to the government of the training programmes, their quality, the size of relocation subsidies and whether they could compensate for people leaving family and friends behind.

ResultsPlus
Examiner Tip

The quality of written communication is taken into account on the high mark base questions that have an asterisk. It is very important to use good written communication and presentation. This includes making use of paragraphs to make it easier to digest the analysis and argument. In this case the candidate could have broken up the answer better.

Paper Summary

Based on their performance on this paper, candidates are offered the following advice:

Section A: supported multiple choice

- Define accurately the key economic term used in each question.
- Be prepared to annotate the diagrams presented in the questions.
- Be prepared to draw diagrams when relevant to the question and make sure these are properly labelled and explained in the text.
- Always refer to the information provided, for example, price and income elasticity of demand figures. This helps to credit responses with application marks.
- Revise thoroughly the topic of market failure, especially positive and negative externalities. This is an area where candidates often struggle to achieve high marks.
- Make sure value is added to answers which use the rejection method. There is no point in simply stating that a particular option is incorrect without explaining why this is the case.

Section B: data response

- Read the question instructions very carefully to make sure your answer remains relevant throughout. All too often candidate answers strayed from the questions set as revealed in Q9(c) on rising UK electricity prices and Q10(c) concerning the external costs from over-fishing of mackerel.
- Focus on developing economic analysis in the high mark base questions. Quite often candidates moved from definitions and a brief explanation of an economic issue straight into evaluation. This was evident in Q9(e) on government subsidies to fish farms and Q10(e) government measures to increase the mobility of labour. Economic analysis typically involves explaining the sequence of events leading up to a particular outcome.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx

Further copies of this publication are available from
Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467
Fax 01623 450481
Email publication.orders@edexcel.com
Order Code US034380 January 2013

For more information on Edexcel qualifications, please visit
www.edexcel.com/quals

Ofqual

Llywodraeth Cynulliad Cymru
Welsh Assembly Government

Rewarding Learning