

Examiners' Report  
June 2018

GCE Economics A 8EC0 01

## Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications come from Pearson, the UK's largest awarding body. 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](http://www.edexcel.com) or [www.btec.co.uk](http://www.btec.co.uk).

Alternatively, you can get in touch with us using the details on our contact us page at [www.edexcel.com/contactus](http://www.edexcel.com/contactus).



### Giving you insight to inform next steps

ResultsPlus is Pearson'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 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](http://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

Pearson aspires to be the world's leading learning company. 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 our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: [www.pearson.com/uk](http://www.pearson.com/uk).

June 2018

Publications Code 8EC0\_01\_1806\_ER

All the material in this publication is copyright  
© Pearson Education Ltd 2018

# Introduction

This paper (8EC0 01) was the third examination paper from the new specification launched in September 2015. As in previous series, the paper appeared accessible to the vast majority of candidates and differentiated effectively between the qualities of responses.

The paper has two sections. Section A has a range of multiple-choice and short-answer questions based on a spread of specification elements in Theme 1, and Section B focused on the energy market and climate change, with a wide range of data provided from which candidates could draw to gain application marks. Section B comprises one data response question broken down into a number of parts, including a choice of extended open-response questions; candidates select one from a choice of two. The time available for the paper is one and a half hours and candidates are advised to spend 25 minutes on the 20 marks available in Section A and 1 hour and 5 minutes on Section B. As with last year's paper, there was far less evidence of candidates experiencing problems with timing.

Each short question was broken down into non-supported multiple choice questions, using option boxes which were dealt with well, plus a short question or question worth 1+2 or 3 marks.

Some candidates did not indicate which essay 6(f) or 6(g) they were answering by marking a cross in the box available, although their written responses did make it clear. Very few candidates struggled to answer some of the questions on the paper, though 6(b), regarding the price elasticity of supply of uranium, was problematic for the large number of candidates who wrote answers regarding the price elasticity of demand for uranium.

On the 20 mark responses there was a distinct preference for 6(g), which asked candidates to evaluate ways in which government intervention could be used to reduce carbon emissions, over 6(f), which asked candidates to evaluate whether nuclear power is over-provided or under-provided in the energy market. Quantitative questions were usually dealt with well with candidates heeding advice to show their working.

Candidates provided logical chains of reasoning to develop their analysis and applied relevant economic theory and data to questions. Most candidates grasped the need in the 15 mark and 20 mark responses that a limited number of points evaluated in depth would be sufficient to access top levels, and this is a clear improvement in terms of many of last year's responses. Diagrams were accurately drawn to a good standard but would still benefit from a careful explanation or evaluation of them.

More able extended answers applied the same approach of carefully explained evaluation applying data or theory to answer the question but there was scope for improvement for many in avoiding Level 1 evaluation which does not go beyond the generic or thin opportunity cost or magnitude type response. In some cases evaluation was not evident, restricting a candidate's ability to access top marks. For top level evaluation in the essays 'sustained judgement' is required - many candidates attempted this as a conclusion with mixed success - in some cases repeating the previous points as a summary rather than making a clear judgement call. A conclusion should answer the question using positive economics. Candidates would benefit from attempting to weigh up theory and the sufficiency of the data as they write, to offer clear and sustained judgement.

Most candidates completed the paper in the time available though some struggled to develop their answers for the last questions or make use of the data available, particularly the extracts. It is important to practise full papers using the Sample Assessment Materials and the full papers from May 2016, 2017 and now 2018, under timed conditions to strengthen exam skills.

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

### **Section A:**

Multiple-choice and short-answer questions

Most candidates found this method of testing highly accessible. A significant number of candidates were very well prepared and demonstrated an excellent understanding of both the specification and the techniques involved in answering the questions, providing accurate definitions and knowledge, accurate diagrams and relevant application. The multiple choice questions format continued to provide an accessible format for candidates to select their chosen option. The key to success was for the candidate to be confident in expressing economic knowledge rather than having to second guess what the question was asking for.

### **Section B:**

Data response questions

The format for data questions continues to meet with a positive response on the whole. Responses to 6(a) on the falling price of uranium provided confident evidence of candidates' revision and good exam technique in use of data and linked development of the reasons for shifts in supply or demand curves, though many candidates did not discuss both factors. Diagrams attempting to illustrate the imposition of a maximum price for energy in 6(e) tended to be better than those required in 6(a). The irrational consumers question 6(c) was well received, though there was a tendency for candidates to not refer to the extract sufficiently clearly to gain their application marks. The issues surrounding the failure of many candidates to read 6(b) properly has been referred to above.

There is a substantial weighting for evaluation marks (16 out of 45 marks) in the level-based responses. A 10-mark question comprises 4 evaluation marks, a 15-mark question comprises 6 evaluation marks and a 20-mark question comprises 6 evaluation marks. Consequently, it is vital that candidates make in-depth applied evaluative comments when required by the question, as well as offering judgement using positive economics throughout.

Candidates have grasped the need to avoid generic evaluation comments and are providing significant depth of explanation and application in their evaluation. To achieve the higher level, the maximum evaluative marks, there needs to be evidence of substantiated judgement, this was often missing or left to a conclusion which summarised the points covered and made a generic judgement call.

## Question 1 (b)

For this question candidates were given a statement indicating that Cuba has a healthcare system with a patient to doctor ratio of 155:1, then asked to calculate the number of doctors in an estimated population of 11 000 000 people. Most candidates were able to gain 2 marks on this question, firstly by using the figures in the correct formula for 1 mark, and then correctly calculating the number of doctors in Cuba from the data given.

- (b) Cuba's population is estimated to be 11 million. With reference to Statement 1 above, calculate the estimated number of doctors in Cuba. You are advised to show your working.

(2)

$$11,000,000 \div 156 = 70518$$

$$155 + 1 = 156$$



The candidate here provides a simple two-step answer, dividing the Cuban population by 156. This is elaborated to show that the 156 figure includes the 155 patients plus the doctor.



Showing your working will enable you to gain a mark for that step even if you make an arithmetical mistake at the final stage of the process.

(b) Cuba's population is estimated to be 11 million. With reference to Statement 1 above, calculate the estimated number of doctors in Cuba. You are advised to show your working.

(2)

$$11 \text{ million} = 11\,000\,000$$

$$11\,000\,000 \div 155 = 70\,967.74194$$

$\approx 70\,968$  doctors in Cuba



This response shows the other acceptable response, with the candidate here dividing 11 000 000 by 155 to achieve an answer in the range of 70 500 and 71 000, as required by the mark scheme.



Again, a clear two-stage answer to the question.

## Question 1 (c)

This was a well-answered question with the majority of candidates able to clearly define a command economy. Typical answers stressed 'centrally planned', 'government run', or 'no or limited private sector'. Less able candidates sometimes confused the definition with that of a mixed economy, hence the stress on 'all' or 'most' of the resources being allocated by the government.

(c) Define the term 'command economy'.

(1)

A command economy is an economy in which the allocation of resources is decided by the government / through state intervention.



This answer is typical of a clear and concise statement which establishes the government at the centre of the allocation of resources.



The mark scheme accommodates a range of accurate definitions for 'command economy'. Concise accurate answers for 1 mark are the best approach.

(c) Define the term 'command economy'.

(1)

An economy where the government owns the means of production and the government decides how and what to produce.



This is another strong answer, where the candidate emphasises state ownership and how it addresses the economic problem.



## Question 2 (a)

This question was answered well by a large majority of candidates and again the use of a two-step method using the data was essential. It was important for candidates to use the data to obtain the first mark, with both marks being reserved for a correct answer. A common mistake was for candidates to get the formula for Price Elasticity of Demand the wrong way around, dividing 8.3 by -5.4 and getting -1.54.

- 2 In February 2016 the Daily Mail newspaper increased its price from 60p to 65p. By August 2016 its sales had fallen by 5.41%.

(a) Ceteris paribus, calculate the price elasticity of demand for the Daily Mail newspaper over this period. You are advised to show your working.

(2)

$$PED = \frac{\% \Delta QD}{\% \Delta P}$$

$$\% \Delta QD = -5.41$$

$$\% \Delta P = \frac{65 - 60}{60} \times 100$$
$$= 8.3\%$$

$$PED = \frac{-5.41}{8.3}$$
$$= -0.65$$

(rounded = -0.7)



**ResultsPlus**  
Examiner Comments

In this example the candidate has clearly worked through the steps of the calculation, gaining the first mark for 8.3, and the second for the correct answer of -0.65.



Writing the correct formula doesn't in itself gain any marks here but it is the first step in obtaining the correct percentage change in price. This then enables the correct final answer to be calculated.

## Question 2 (c)

Another typically well-answered question, with the majority of candidates able to identify that 'ceteris paribus' meant 'all other things being equal' or 'all other factors remain unchanged'. Marks were lost by candidates who stated that all factors are the same or remained constant. It was crucial on this question to identify implicitly or explicitly that the variable being measured changes, in some sense.

(c) Define the term 'ceteris paribus'.

(1)

everything else remaining equal, where the only change is the one being measured with no other change



This a detailed answer which clearly gains the available mark.



The use of the word 'else' after everything is crucial to gaining the mark. The second part of the sentence leaves the examiner in no doubt that the candidate can define the concept clearly.

(c) Define the term 'ceteris paribus'.

(1)

Assuming all other factors remain constant



This answer is more succinct than the first and is sufficient for the mark.



Precision here is the key, with the word 'other' demonstrating clear understanding.

### Question 3 (b)

This question did cause some difficulties for candidates, though most were still able to score highly. Many answers developed inequality as a reason, with NHS treatment going some way towards helping those priced out of unaffordable private dental care. Another popular approach was to consider the positive externalities of state provision for employers or family members. Candidates often misidentified dental care as a public good and developed arguments along this approach. Some candidates argued that NHS treatment is free, though the data does indicate that it isn't.

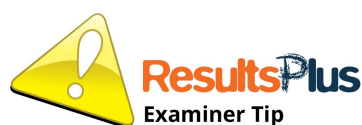
(b) Explain **one** possible reason why the state provides NHS dental treatment.

(2)

The state may provide NHS dental treatment as those with low incomes may not be able to afford the dental treatment provided by the private sector. Prices of private dental treatment are higher as the private sector aims to maximise profit. The state will improve social welfare by making dental treatment more affordable and accessible.



An excellent answer which scores 2 marks. The candidate clearly identifies that those on low incomes may not be able to afford private sector dental treatment. This is because private sector dentists aim to maximise profit, meaning that prices are higher than in the NHS.



Two marks are gained by the statement of a clear reason, followed by some development.

(b) Explain **one** possible reason why the state provides NHS dental treatment.

(2)

NHS dental treatment is a public good, as it is non-excludable and non-rivalrous. The state provides this treatment due to the free rider problem, which means that without government intervention such as in a free market economy, the NHS dental treatment would not be provided as once it is provided people cannot be forced to pay for it. Therefore the state provides it as a public good.



This answer is typical of a number that developed the idea of NHS treatment being a public good. The candidate shows a textbook understanding of public goods but has misidentified dental treatment as a public good. In the last two lines of the answer the candidate says that 'people cannot be forced to pay for it', even though the data gives the cost of a tooth filling on the NHS. This scored 0 marks.



Make sure you read the question carefully and use the data. NHS dental treatment has a cost at the point of use. People can be charged for it.

### Question 3 (c)

A large majority of candidates were able to identify 'asymmetric information' as a situation where one party in a transaction has more or superior information than another. Many applied it to dentists knowing more about the need for treatment than patients, and thus charging them for 'unnecessary' work. The example of second-hand car dealers knowing more about the history of a vehicle than prospective customers was also very popular.

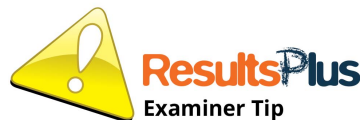
(c) Define the term 'asymmetric information'.

(1)

Asymmetric information is when ~~there~~  
one side of the trading process knows ~~more~~  
more than the other (has more info on market).



A precise definition, referring clearly to 'the trading process', which is sufficient to gain the mark.



It is important to focus on 'the transaction', 'trading process' or something very similar here to be sufficiently clear.

(c) Define the term 'asymmetric information'.

(1)

asymmetric information is unequal information or  
different information. This happens when consumers either  
have more information or less information than  
the producers or vice versa.



This is an answer that stresses the unequal nature of the information and then links it to a commercial transaction, though not explicitly. It also identifies the fact that consumers can sometimes have more information than producers.



The first part of the answer is rather vague but the mention of 'producers' and 'consumers' is sufficient to gain the mark.

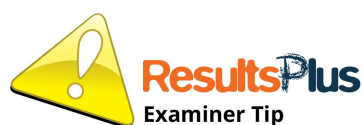
(c) Define the term 'asymmetric information'.

(1)

Its when the business and consumers know the same amount of information about a market / product / service.



Here the candidate fails to identify the 'asymmetry' of the information, stating that the business and consumers 'know the same amount of information'. 0 marks.



Key definitions should be learned precisely.



## Question 4 (b)

Though most candidates were able to score 2 marks on this question the majority were unable to score 3 marks. So, whilst candidates could define inferior goods and/or give a formula, and many could identify bus travel as an inferior good, there was insufficient manipulation of the data, e.g. calculating the percentage change in income, i.e. 6.2%, or the YED of bus travel, i.e. -0.48.

(b) Using the data provided, explain whether bus travel is a normal good or an inferior good.

(3)

$$\frac{\text{new-old}}{\text{old}} \times 100$$

$$\frac{25,700 - 24,200}{24,200} \times 100 = 6.198\%$$

$$\frac{\% \Delta QD}{\% \Delta Y}$$

$$\frac{-3\%}{6.198\%} = -0.48$$

Bus travel is an inferior good as it's YED is -0.48.



This is an excellent answer which gains marks for the relevant formula, a correct calculation, and the statement that bus travel is an inferior good. 3 marks.



Use the data provided to calculate whether bus travel is a normal or an inferior good.

(b) Using the data provided, explain whether bus travel is a normal good or an inferior good.

(3)

An inferior good is a good which demand will fall when incomes rise. A normal good is a good which people will consume when their incomes rise. The rising median household income, from £24,200 to £25,700, caused demand for bus travel to fall by 3%. Therefore, bus travel is an inferior good because demand has fallen since incomes have risen.



In this example the candidate both defines inferior goods and identifies that bus travel is an inferior good. However, the data is only quoted and not used to calculate the change in income or YED.



Use the data provided in the question beyond simply re-stating what is in the question.

## Question 5 (a)

A well-answered question, where the vast majority of candidates were able to score the mark. Consumer surplus as 'the difference between what consumers are willing to pay and what they actually pay for a good or service' was a typical response. A few candidates still confused the idea of consumer surplus with a market surplus, where price is above the market equilibrium.

- 5 The British Broadcasting Corporation (BBC) is a TV broadcaster. It is financed through an annual TV licence fee of £145.50. At this fee level many TV owners benefit from consumer surplus.

(a) Define the term 'consumer surplus'.

(1)

Consumer surplus is the difference between the maximum price consumers are willing to pay for a good, and the ~~max~~ actual market price.



**ResultsPlus**  
Examiner Comments

The clear understanding of consumer surplus as the difference between what consumers are prepared to pay and what they do pay is evident.



**ResultsPlus**  
Examiner Tip

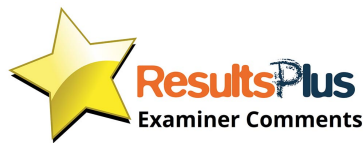
Use a precise definition.

5 The British Broadcasting Corporation (BBC) is a TV broadcaster. It is financed through an annual TV licence fee of £145.50. At this fee level many TV owners benefit from consumer surplus.

(a) Define the term 'consumer surplus'.

(1)

The ~~amount~~ ~~amount~~ amount of money a consumer is willing to pay for a good or service above what they actually pay.



This answer conveys the sense of utility gained by consumers paying less than they are prepared to.



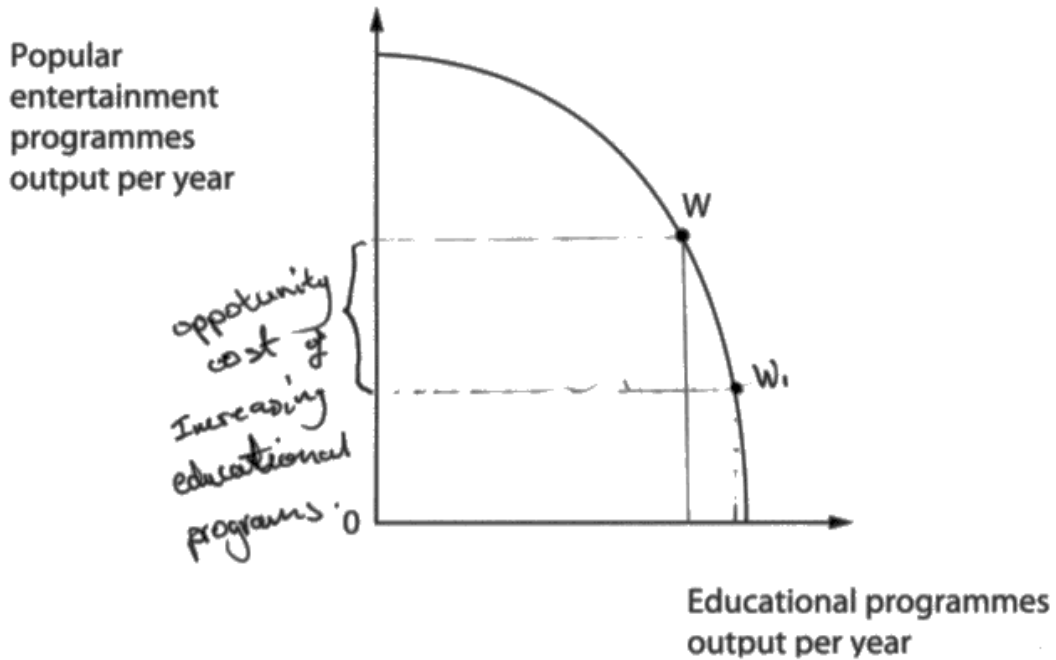
Stating consumer surplus in financial terms is very helpful.

## Question 5 (b)

A small majority of candidates achieved full marks on this question. Most were able to identify a point to the right of W for 1 mark. However, many did not properly indicate the opportunity cost of providing more educational programmes. Some answers also shifted the curve outwards to indicate more educational programmes.

- (b) The diagram shows the production possibility frontier for the BBC. Assuming the BBC is at point W, annotate the diagram to show the opportunity cost of providing more educational programmes.

(2)



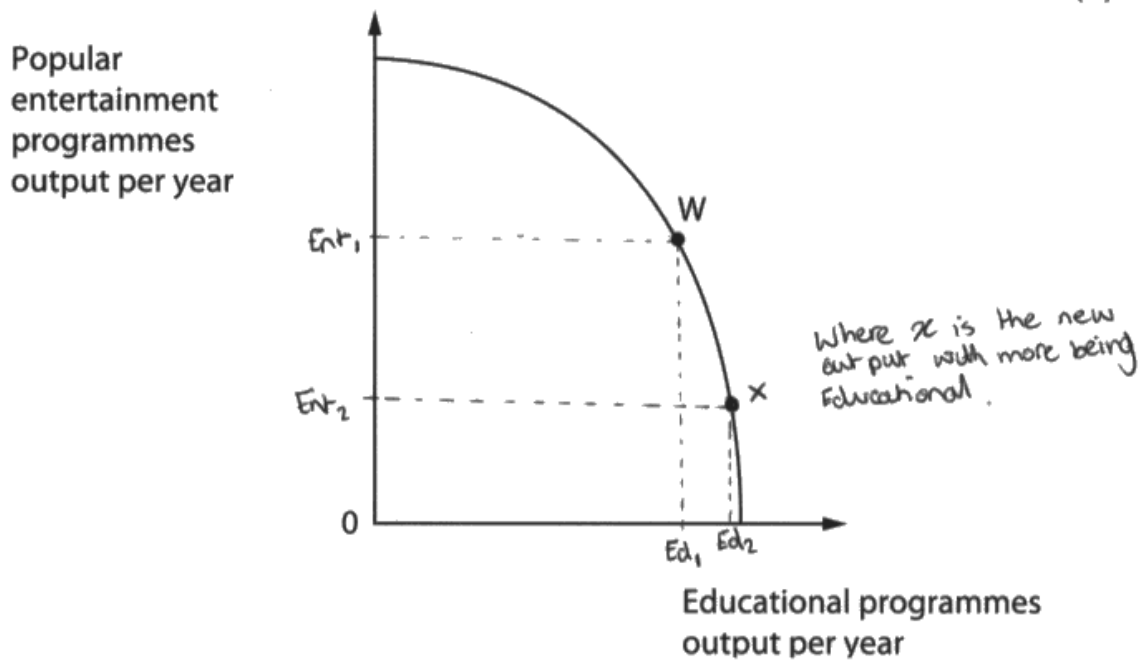
This response answers the question precisely, showing a point to the right of W, whilst clearly indicating the opportunity cost of providing more educational programmes.



Clearly annotate your diagrams. Opportunity cost is measured on the relevant axes.

(b) The diagram shows the production possibility frontier for the BBC. Assuming the BBC is at point W, annotate the diagram to show the opportunity cost of providing more educational programmes.

(2)



While this answer shows X as the new output it fails to identify the opportunity cost and only scores 1 mark.



Clearly annotate the diagram to show the opportunity cost.

## Question 6 (a)

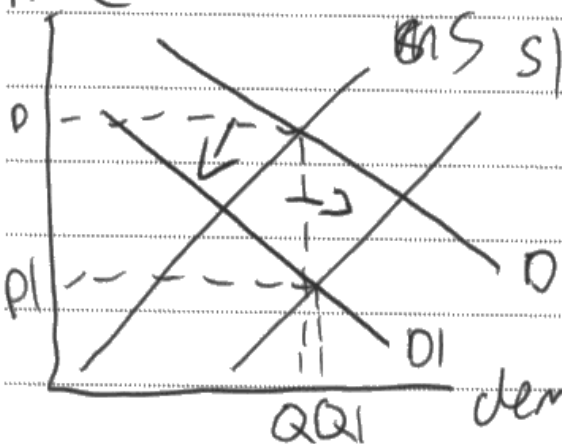
This proved to be a reasonably accessible question with most candidates scoring at least 3 marks, though only a small number were able to access all 5 marks. The question asked for a supply and demand diagram, and while candidates were able to do this most only drew a supply shift, thus missing the final analysis mark which required them to show a correct shift in demand and supply. Extract A and Figure 1 offered plenty of scope for the application marks, and candidates were able to identify both supply-side factors, such as Kazakhstan's stockpiles of uranium; and demand-side factors, such as falling public confidence in the nuclear industry following the Fukushima disaster.

- 6 (a) With reference to Figure 1 and Extract A, explain why the price of uranium has 'fallen to a 13-year low' (Extract A, lines 2 and 3) in 2016. Include a supply and demand diagram in your answer.

(5)

Uranium is a scarce resource meaning it is difficult to find and extract. However, due to environmental disasters such as Fukushima, the demand for uranium has decreased rapidly due to its harmful effects. This has led to uranium being stockpiled and therefore its supply has increased.

price



Higher supply and lower demand = lower sales so price decreased. To incentivise purchase reduce supply.



This answer achieved 5 out of 5 marks. The knowledge mark is achieved in the second sentence with decreased demand for uranium. The candidate develops this in the context of the Fukushima disaster, thus accessing the first application mark. The candidate then goes on to discuss the stockpiling of uranium, accessing the second application mark. The diagram show both a price fall and the shift in both demand and supply for the second analysis mark. Both must be shown to get this second mark.

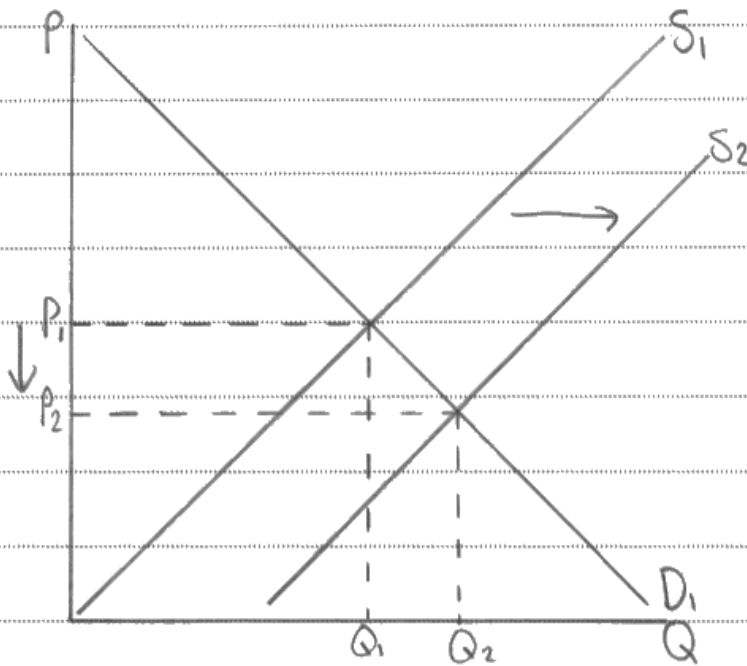


Always use the data to substantiate your points. Here the candidate does that sufficiently well enough to gain the available application marks, while gaining the analysis marks by showing shifts in both demand and supply. Be sure to correctly label the direction of the shifts.



- 6 (a) With reference to Figure 1 and Extract A, explain why the price of uranium has 'fallen to a 13-year low' (Extract A, lines 2 and 3) in 2016. Include a supply and demand diagram in your answer.

(5)



The price of uranium has 'fallen to a 13-year low' due to (as the extract states) many firms ceasing production due to their being large stockpiles. This has caused a ~~left~~ rightward shift of the supply curve ( $S_1 \rightarrow S_2$ ) as they have a large supply ~~is~~ that has been stockpiled. This shift has then caused price to fall ( $P_1 \rightarrow P_2$ ) which explains why the price of uranium has fallen.



This answer achieved 3 out of the 5 marks. The candidate begins by drawing a supply and demand diagram which shows a rightward shift in supply and a price fall. The supply shift gets the knowledge mark, while the fall in price achieves the first analysis mark. The candidate then goes on to discuss the stockpiles of uranium. There is no discussion of demand-side factors whatsoever. Consequently, the opportunity to achieve further application or analysis marks is missed.



Simply re-stating the question is not sufficient to pick up application marks. Make sure you use the data and think how you can develop your answer analytically.

## **Question 6 (b)**

This question was about the price elasticity of supply. However, many candidates went on to discuss price elasticity of demand or loosely referred to 'elasticity' in general. As a result of this misreading of the question and/or poor understanding of the factors influencing the price elasticity of supply, many candidates did poorly on the question. More able candidates were able to refer to factors in Extract A determining the price elasticity of supply. The extract discusses about the time taken to build a uranium mine in Spain, and the difficulty of finding uranium in the right concentrations. It also discusses how companies have to comply with many regulations before opening new mines. All of these factors suggest that the price elasticity of supply of uranium is very low. However, the extract also refers to stockpiles of the metal until 2020, suggesting that there is the ability to increase supply in response to price. Together with the new Spanish mine's ability to produce 2.2 million kilos a year in 2018, supply is becoming increasingly price elastic.

(b) With reference to Extract A and your own knowledge, assess whether the supply of uranium is likely to be price elastic or price inelastic.

answer

(10)

Supply of uranium is likely to be inelastic due to the time ~~period~~ lag involved with increasing supply. Due to "regulations before opening a uranium mine" it would take a long time to build these mines as ~~they~~ these regulations are likely to hinder and delay the ~~production~~ construction of the mine. Therefore producers would find it difficult to respond to an increase in demand for uranium, as it will take time to open the mine and to extract the uranium, therefore ~~the~~ <sup>supply</sup> may be price inelastic.

However to evaluate, this may only be in the short-term when new mines need to be built, and in the long-term, (once the mine has already been built) it would be much easier for producers to respond to changes in demand, therefore supply would be more price inelastic in the long-term.

However

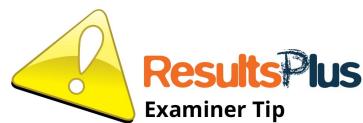
Also, supply of uranium is likely to be

elastic.  
industries due to the <sup>large</sup> ~~small~~ stockpiles of uranium in the world at the moment. As we can see from Fig. 1, there is currently a surplus of uranium of approximately 3-4%. This would mean that producers would easily be able to respond to changes in demand as they do not need to extract more uranium due to the stock readily available. Therefore supply may be considered elastic.

However, stockpiles of uranium are constantly changing which means the elasticity of supply would constantly change too.



This answer scored 8 out of 10, achieving both Level 3 knowledge, application and analysis (KAA) and Level 2 evaluation (E). The candidate is clearly able to identify regulatory factors slowing down the building of a uranium mine and how this reduces the ability of firms to respond to an increase in demand. Although not mentioning the Spanish mine explicitly, or explaining the concept of PES explicitly, there is enough implicit understanding to score highly in terms of KAA. The candidate then goes on to consider the time factor, and how over time supply would be more elastic (though the candidate says 'inelastic', we can give the benefit of the doubt here). This is, therefore, a good evaluative comment, which is then developed further in the next paragraph. This is in context, referring to Figure 1, and moves the candidate into Level 2 evaluation.



Ensure that you consider factors determining whether the supply of uranium, in this case, is price elastic or inelastic. One side of the argument accesses the KAA marks and the other side the evaluation marks.

(b) With reference to Extract A and your own knowledge, assess whether the supply of uranium is likely to be price elastic or price inelastic.

(10)

PED is a measure of the responsiveness of a change in demand to a change in price.

Inelastic = unresponsive

Elastic = responsive.

Uranium is likely to be price elastic because the metal is relatively common, but locating it can be hard. This means that production can vary, meaning PED varies.

The shorter time it takes, the more inelastic elastic.

Australia & Kazakhstan have large supplies of the metal. Another factor affecting this is availability of substitutes. Many countries still have substitutes such as coal power stations which have increased in demand since 2011's Japan Fukushima incident. This is likely to make uranium more price elastic.

However, <sup>elasticity</sup> this is dependent on the size of the drop in demand.



This answer scored only 1 mark out of 10. The candidate writes about demand-side factors almost exclusively. There is a brief reference to uranium being a common metal, meaning production can vary, meaning PED varies. This is clearly confused. The candidate then goes on to say how Australia and Kazakhstan have surpluses of the metal but there is no attempt to link it to the elasticity of supply.



Reading the question remains a fundamental skill. Misreading this kind of question can be very expensive for candidates with 10 marks available in this case.



## Question 6 (c)

The majority of candidates were able to score between 3 and 4 marks for this question, and Extract B was an accessible source of information. Most candidates could identify examples of irrational behaviour in the extract, which could be developed analytically. Typical answers focused on inertia or computational problems to explain why four million households are still on the most expensive rates. More able candidates were able to identify a reason, explain it, and substantiate it with reference to the Extract. Less able candidates neglected to support their comments contextually.

- (c) With reference to Extract B, explain **two** likely reasons why many consumers of energy have not switched to suppliers offering lower prices.

(6)

Those on low incomes are still on the most expensive energy rates' (Extract B). This could be due to habitual behaviour. If the consumer ~~is~~ has never used any other energy supplier, they may be less inclined to switch due to their habit of using the more expensive supplier. If they don't know any different then it would be unlikely for them to change due to their habit.

Another reason could be consumer computation. If a consumer doesn't understand how energy suppliers work, they are likely to settle for whatever seems easiest, however this may not be the cheapest option. This could be due to them being less ~~is~~ able to process all the possibilities or early being scammed into going for the more expensive option if they're made to believe it's more 'reliable' or 'beneficial'.



This answer scored 5 out of the available marks. The first paragraph starts well, with a clear reference to Extract B and then gives the reason of 'habitual behaviour'. The point is then clearly explained, gaining the first analysis mark. The second paragraph explores the concept of 'consumer computation', citing it a reason for not understanding how energy suppliers work. It is explained clearly though is not substantiated contextually.



In an answer such as this be sure to refer explicitly to the extract to gain application marks.

(c) With reference to Extract B, explain **two** likely reasons why many consumers of energy have not switched to suppliers offering lower prices.

(6)

rational behaviour is when consumers buy ~~or~~ and consume ~~to~~ ~~the~~ goods and services that maximise utility.

~~the~~ ~~is~~ 4 million households are still on the most expensive rates

According to Extract B, this

may be due to a weakness at computation as consumers ~~be~~

may underestimate the probability of the consequences of switching and may not be able to calculate

the additional utility they will get from ~~consuming~~ <sup>switching</sup>.

The decade of rising energy bills but low number of consumers switching could also be due to habitual behaviour leading to irrational consumption as consumers may be too lazy to search for ~~the~~ better deals and stick to what is familiar.



This answer achieved 6 marks out of 6. It begins by referring to the 4 million households still on the most expensive rates, scoring the first application mark, and then goes on to explore 'weakness of computation' as the reason, linking the explanation to the inability of consumers to calculate the additional utility that could be gained from switching. In the second paragraph the candidate again scores the application mark with a clear reference to the decade of rising energy bills and cites the reason of 'habitual behaviour' by way of explanation. This is then developed by saying consumers are too lazy to search for better deals, thus gaining the analysis mark.

## Question 6 (d)

This was an accessible question for the vast majority of candidates and most were able to score between 3 and 4 marks. Candidates were able to clearly understand that the question was looking for sources of energy rather than energy itself. More able answers understood this because 'energy' can run out in the short-run whatever it is made from if demand is high enough. The question is about whether the source of the energy is renewable or not.

(d) Using examples from the information provided, explain what is meant by renewable and non-renewable energy.

(4)

Renewable energy is an energy source that can be exploited over and over again.

Renewable energy will naturally replenish itself in order to be re-exploited.

As stated in extract A renewable energy sources are things like solar and wind power however these can not be exploited at the same time and therefore are not as sustainable.

Non-renewable energy is an energy source that can only be exploited once.

Non-renewable energy can not replenish and is normally natural based ores such as coal.

These are always available through mining however once they have all been mined they can no longer be replenished.



This answer scored 4 marks out of 4 and clearly identifies how renewable energy sources can be replenished in order to be re-exploited, whereas non-renewable sources can be exploited only once. Examples are chosen carefully to substantiate the candidate's point.



A very clear and detailed answer which leaves the examiner in no doubt that the candidate understands the difference between the two energy sources.

(d) Using examples from the information provided, explain what is meant by renewable and non-renewable energy.

(4)

Renewable energy is energy that can be replenished over time, like wind or solar power, which means it'll keep being produced as we use it up.

Non-renewable energy is energy that cannot be replenished over time, like nuclear energy, which means no more can be produced as we use it up.



This answer scored 4 out of 4. It clearly identifies that the energy source is replenishable for wind or solar power, while nuclear energy cannot ultimately be replenished because uranium is finite in supply.



A clear succinct answer that uses a clear example to back-up each type of energy source identified.

## **Question 6 (e)**

This question differentiated significantly between candidates, as one would expect from the higher tariff responses, though the mean mark was just below 8. Many candidates did not score highly in terms of evaluation, for which skill there was 6 marks. Most candidates were able to draw a good maximum energy price diagram, and could go on to explore the impact on both consumers and producers reasonably effectively. Marks tended to be lost because of the inability of less able candidates to consider the negative effects on consumers, such as energy shortages, or how the impact of the government's intervention will depend on how far below the equilibrium the price is set. Other evaluative strategies considered price elasticity of demand or supply, and the concept of government failure.



The UK Government is considering introducing a maximum price for energy.

(e) Discuss the likely microeconomic effects of this decision on energy producers and consumers. Include a supply and demand diagram in your answer.

(15)

<sup>price</sup>  
Maximum is a form of government intervention it aims to reduce market failures which causes an efficient allocation of resource by setting a price ceiling.

Extract B states that prices has increased for 15% for 15 years and four million households. Applying a maximum price on energy which is underprovided can help low income people ~~earn~~ have more access to energy.

and generate positive externalities such as lower crime rates as low income people

may be more satisfied at the government approach

reducing their attempt of a crime. Another cause on

consumers is reduce in income inequality as a lower income consumers <sup>and</sup> have less spending on living they would be more happy ~~and~~

benefits the society as there will be less protest and the overall

society will have a positive attitude. ~~the~~ consumers will gain more

~~surplus~~ surplus as prices are below ~~equi~~ equilibrium gaining the

price which producers loss in surplus. Producers will have an

effect of lower profit and market turnover as the price

is set below the equilibrium their ~~willing~~ willingness to provide

as that price will decrease from  $Qd_1$  to  $Qd_2$ . This will

cause less competitiveness as the price acts as a signalling

and incentive function to tell producers to leave the

market because there is less profit to be earned.

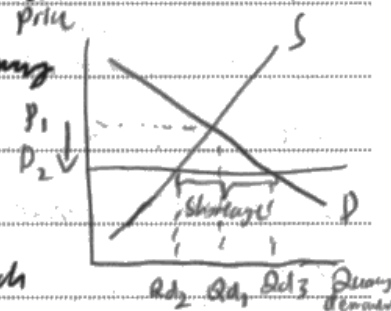
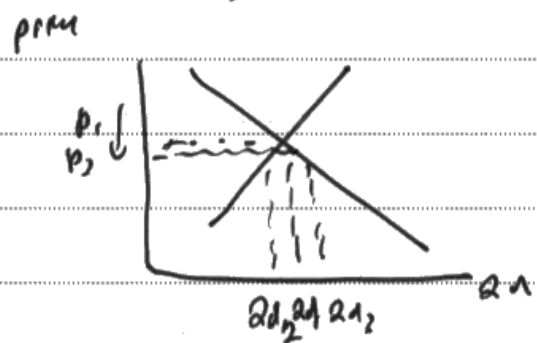


Figure 1 shows that shortage will occur after the year 2017 on of these reasons

Government failure may occur in the attempt to correct market failure as administrative cost may increase due to setting up a department to monitor and enforce the law. Regulators will also need to be hired which will increase the cost on the government. Therefore opportunity cost will exist since the money used is forgone and can be used in other ways such as education.

The <sup>effect</sup> ~~arrangement~~ of the maximum price may not be effective if the maximum price is set too just below the market equilibrium then low income family not benefit a lot in it.





This answer achieved 13 out of 15. The KAA is at the top of Level 3. There is a clear diagram and then sustained chains of reasoning discussing how a maximum price can help lower income people, perhaps reducing income inequality. There is reference to rising consumer surplus, demonstrating strong use of economic concepts. Analysis of the impact on producers then follows, with a discussion of lower profits and the strong possibility of some producers exiting the market. On the next page there is some good evaluation referring to the administration costs of the scheme and the possibility of government failure. There is also some discussion of where the maximum price is set, in relation to the equilibrium, though the diagram isn't properly labelled and the point is less developed than the first. Overall, the evaluation is at the top of Level 2.



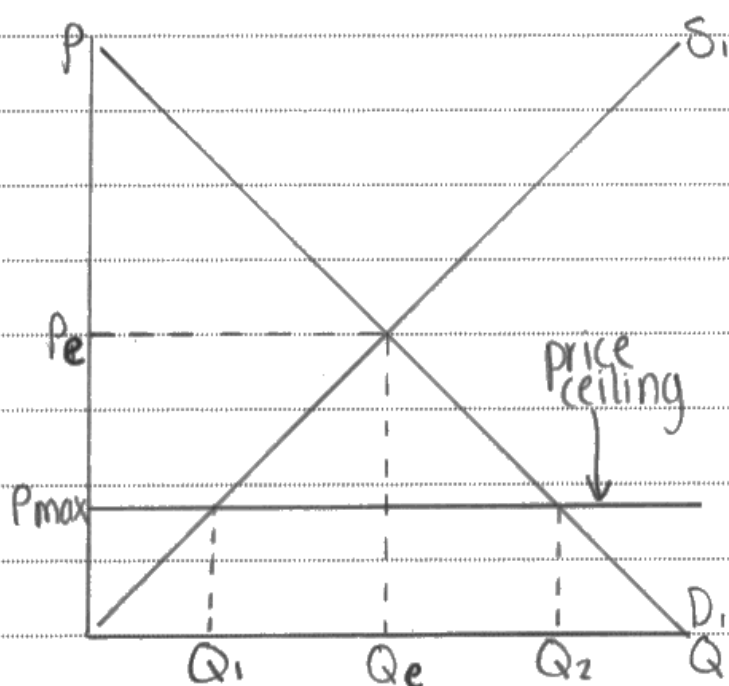
In depth evaluation is the key to accessing all available marks. Remember to label diagrams properly and sustain your arguments to gain full marks.

The UK Government is considering introducing a maximum price for energy.

(e) Discuss the likely microeconomic effects of this decision on energy producers and consumers. Include a supply and demand diagram in your answer.

(15)

A maximum price is used to fix negative externalities, and will be imposed ~~above~~<sup>below</sup> the equilibrium price. A maximum price sets a price ceiling for firms which they cannot breach.



The maximum price ( $P_{max}$ ) will be imposed below the equilibrium price ( $P_e$ ), as the Government wants to reduce the price of energy and so sets a price ceiling

which firms cannot breach. By setting a maximum price, ~~the~~ the market price will fall ( $P_e \rightarrow P_{max}$ ). This is due to ~~firms want the Governm~~ Government setting a lower maximum price, which clearly shows that the price will fall. However, maximum prices can be difficult to target as the Government doesn't have perfect information.

In addition, the maximum price imposed will decrease the quantity supplied ( $Q_e \rightarrow Q_1$ ) but will increase the quantity demanded ( $Q_e \rightarrow Q_2$ ). This is because producers will want to supply less due to the ~~increase~~ decrease in price meaning they won't collect as much revenue. Also, consumers will demand more as it is now cheaper for them, to do so, but without the supply they won't be able to get the good.

Furthermore, firms will also see a decrease in revenue. With a lower price, producers won't be making as much off of each sale so their total revenue will end up decreasing. ~~However, it can be argued that maximum prices stimulate the creation of black markets~~

To conclude, a maximum price on energy will lead to a decrease in price, a decrease in the quantity supplied, an increase in the quantity demanded and a decrease in revenue.



This answer scored 8 out of 15 and is typical of a mid-level answer. KAA is at the top of Level 2. There is little use of context but the diagram is precise and well explained. The candidate addresses the impact on producers, but only very briefly considers consumers. In terms of evaluation, there is a sentence referring to the difficulty of targeting maximum prices because the government doesn't have perfect information. The three lines referring to consumers on page 2 of the answer are also mildly evaluative. These comments are generic, and therefore evaluation is Level 1.



In questions offering this many marks, always look for the opportunity to develop evaluative points, using data from the extract to back-up your point.

## **Question 6 (f)**

Less than fifteen percent of candidates attempted this question and the performance was much poorer on the whole compared to 6(g), with the mean mark being less than 9 compared to 11 for 6(g). More able candidates considered the extent to which nuclear power is over-provided or under-provided using the concepts of external costs and benefits. Within good essays, there was the confident use of the Extract A and C, referring to a range of external costs in the production of nuclear energy. External cost in production diagrams, which were clearly labelled, were a hallmark of good answers. The evaluation usually referred to nuclear power as reducing the external costs associated with carbon emissions and explored a range of other benefits from nuclear power, such as affordable energy. Many candidates also considered the extent to which nuclear power was 'safe' in the context of the very specific circumstances of Fukushima and the likelihood of a recurrence of such a disaster. Hinkley Point and the future of UK energy supplies was also often considered. For many candidates, however, there was considerable confusion as to the nature and extent of the externalities discussed.

**EITHER**

(f) Using the concept of external costs, evaluate whether nuclear power is under-provided or over-provided in the energy market. Use an appropriate diagram in your answer.

(20)

**OR**

(g) Evaluate ways in which government intervention could be used to reduce carbon emissions. Use at least one appropriate diagram in your answer.

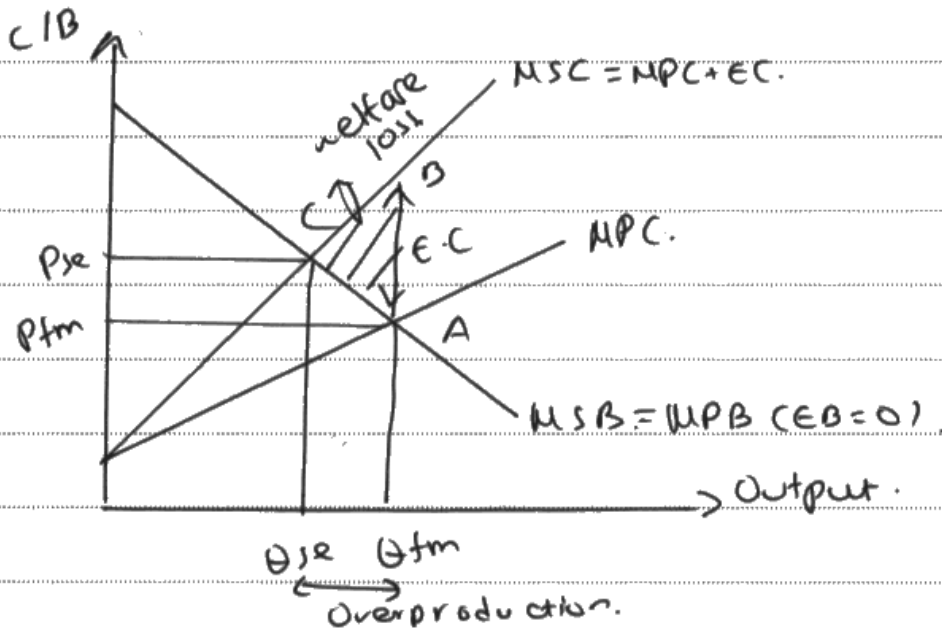
(20)

Indicate which question you are answering by marking a cross in the box . If you change your mind, put a line through the box  and then indicate your new question with a cross .

Chosen question number: Question 6(f) . Question 6(g)

Write your answer here:

Marginal social costs consist of both private and external costs ( $MSC = MPC + EC$ ). External costs are those costs which are raised on to third parties during an economic activity, (e.g. pollution).



As shown on the diagram above the free market produces at  $P_{fm}$   $Q_{fm}$ , where only private costs and benefits are considered. However,



external costs <sup>of nuclear power</sup> exist ~~is~~, meaning that at  $P_m = Q_m$ , the market undervalues the true cost to society, ~~is~~ leading to overproduction  $Q_{se} > Q_m$ , where market failure exists as  $MSC > MSB$ , and a welfare loss  $\Delta ABC$  exists.

To begin with, according to Extract A, many external costs ~~for~~ of nuclear ~~is~~ power exist ~~is~~, indicating that nuclear power is overproduced. As stated in Extract ~~A~~ nuclear power is dangerous as it can lead to explosions. For example 'the devastating accident at the nuclear power station' has led to a 'leak of radiation', 'reduced confidence', and increased 'chances of cancer'! ~~There~~ Therefore this accident could have devastating effects on the surrounding area and environment, as it could destroy habits and landscape, ~~then~~ making the area less attractive for future investment! Additionally, increased chances of cancer, could mean that there will be a loss of productivity, due to ~~is~~ a less healthy labour force, which could damage the country's competitiveness! For example in the UK, the UK's productivity is 17% less than the G7, meaning that they couldn't rich a fall in productivity.

However, regarding the environment, nuclear power is definitely a better substitute than fossil fuel. As said in Extract C, 'carbon dioxide emissions, result from the increase in the use of coal, gas, oil' and also extract A says that 'no country can reduce carbon dioxide emissions, which are causing climate change, without the nuclear'. Hence here we could argue that actually nuclear power leads to external benefits, due to lowering the levels of CO<sub>2</sub> in the atmosphere. 'Climate change could cause hundreds of millions of people to suffer hunger, water shortages, and coastal flooding'. Hence with nuclear power, we are reducing these ext. costs, thus society would benefit from higher air quality of using nuclear. In this case, nuclear power has many external benefits including ~~and~~ employment, and thus it could be underproduced.

However, it is difficult to place a precise monetary value on externalities, as it is very subjective. Also we assume that external benefits of nuclear power

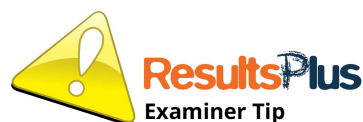
are 0, but they actually exist.

Brexit, could lead to a fall in  
expected demand for nuclear in general.

Thus ext. costs will be lower!



The candidate begins with a clear theoretical explanation of the social costs of production, exploring negative externalities in the production of nuclear power. The candidate then goes on to illustrate how nuclear power is over-produced, leading to a range of possible negative externalities, with clear reference to the context. The candidate discusses the dangers of nuclear accidents and then links them to the possibility of lower productivity in the UK if people are affected negatively by such accidents. This is very good KAA and accesses Level 4. On page 3 the candidate then proceeds to consider how nuclear power is under-provided, in context, helping to reduce the levels of carbon dioxide in the atmosphere, and therefore the impact of climate change, with positive consequences for humanity. The candidate also discusses external benefits from employment, although this point is less well developed. All of the arguments are in context and well explained. This answer therefore accesses Level 3 evaluation. The conclusion is not quite developed into a substantiated judgement.



Always try to 'anchor' an essay's analytical structure around a clearly drawn diagram, as the candidate does here. Interlink analysis and reference to the context throughout to build clear, well-substantiated points. Be sure to come to a conclusion at the end of the essay to access full marks.

**EITHER**

(f) Using the concept of external costs, evaluate whether nuclear power is under-provided or over-provided in the energy market. Use an appropriate diagram in your answer.

(20)

**OR**

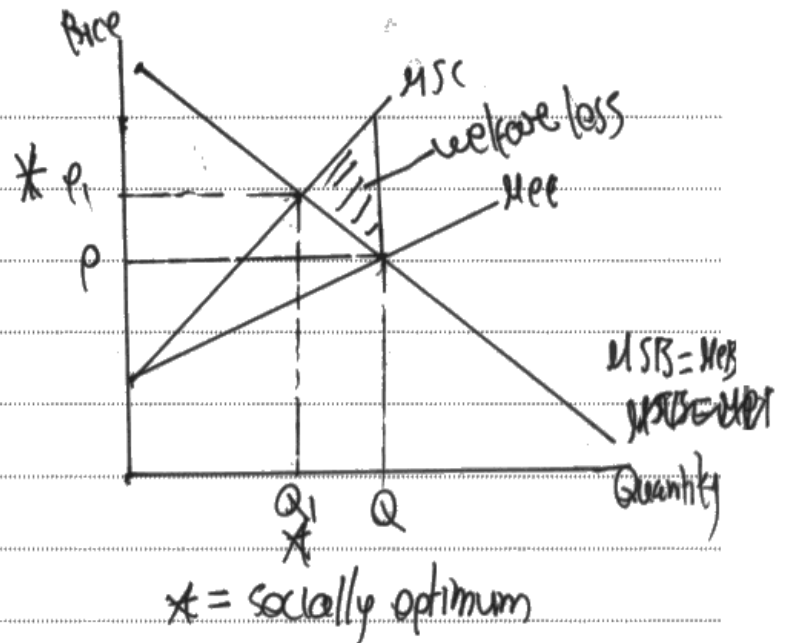
(g) Evaluate ways in which government intervention could be used to reduce carbon emissions. Use at least one appropriate diagram in your answer.

(20)

Indicate which question you are answering by marking a cross in the box . If you change your mind, put a line through the box  and then indicate your new question with a cross .

Chosen question number: Question 6(f)  Question 6(g)

Write your answer here:



External cost are cost that are created from third party spill over effects from consumption and production that affect those not involved in the market transaction

One reason for being over-provided it is because if something goes wrong in the nuclear station then high doses of radiation leads increase the risk of cancer so this will means that people's standard of living would decrease and also their death rate will increase

Another reason for being over-provided if it is because by building 50 nuclear stations like Japan had initially done, this can lead to loss of habitats and therefore killing many animals for example cutting forests destroys the habitats of birds this can lead to a loss of biodiversity

Another reason is because radioactive waste can lead to river through leaching killing many fish but also we drink the water from the river so we have increase chance of getting cancer

Another reason is by building 60 stations like China will do this increases air pollution and also noise pollution which means people people will have health problems especially the ones living very close to the nuclear station

However it they can be under-provided because it provides a reliable source when the world population is ~~now~~ increasing, unlike solar power and wind power so we must build more of them in order to ~~prevent~~ prevent the extinction of the human ~~race~~ race. Also no country can't reduce carbon emissions ~~significantly~~ which are causing climate change without nuclear. Therefore we need to build more nuclear stations in order to reduce ~~of~~ greenhouses in the air and so save the planet like and other things like the extinctions of polar bears from melting ice

Also another reason is because demand for uranium is guaranteed over the next two decades so by investing in the short run can cause a massive benefit to the economy in the long run since the demand is guaranteed. Lastly nuclear stations are ~~more~~ <sup>more</sup> efficient <sup>and reliable</sup> energy supply than solar power which is dependent on the sun ~~and also it is more~~ whereas nuclear is not dependent to anything except uranium which is a common metal.

\* significantly



**ResultsPlus**  
Examiner Comments

This answer scored 10 out of the 20 marks. The candidate begins with a reasonably accurate negative externality of production diagram, which is then explained. The candidate then goes on to consider a range of negative externalities which are attributable to nuclear power generation. These are developed at a basic level and fit between the bottom of Level 3 and the top of Level 2. The candidate is going for quantity rather than quality. The candidate takes a similar tack with the case for nuclear power being underprovided. Points are briefly explained but in context. This edges into Level 2 evaluation.



Take the time to construct a series of well-developed and sustained points rather than going for quantity. Breadth of argument is important but there needs to be a balance between breadth and depth. Too many points will leave little time to develop a sustained chain of reasoning.

## **Question 6 (g)**

This was a very accessible question and very popular with candidates. More able candidates explained a range of different policies, almost always with a clearly drawn diagram to further the analysis. Policies tended to be tradable permits, indirect taxation, and the provision of subsidies to alternative energy suppliers. They used the context extensively to substantiate points made in order to access Level 3 and above. The extracts provide multiple avenues for candidates to explore, e.g. the shutting down of coal-fired power stations by 2025 in Extract A. Extract C suggests multiple policies, so one would expect to see substantial development of them analytically. Evaluation of the policies tended to focus on why the policies may not be effective. More able answers developed points based on the excessive administration costs of regulation, government failure to set the tax at the most appropriate level to correct the stipulated market failure, and questioning the extent of the link between carbon emissions and climate change. The mean mark on this question was 11, and had a wider range of marks indicating that candidates did better at the bottom end than on the previous question.



**EITHER**

(f) Using the concept of external costs, evaluate whether nuclear power is under-provided or over-provided in the energy market. Use an appropriate diagram in your answer.

(20)

**OR**

(g) Evaluate ways in which government intervention could be used to reduce carbon emissions. Use at least one appropriate diagram in your answer.

(20)

Indicate which question you are answering by marking a cross in the box . If you change your mind, put a line through the box  and then indicate your new question with a cross .

Chosen question number: Question 6(f)  Question 6(g)

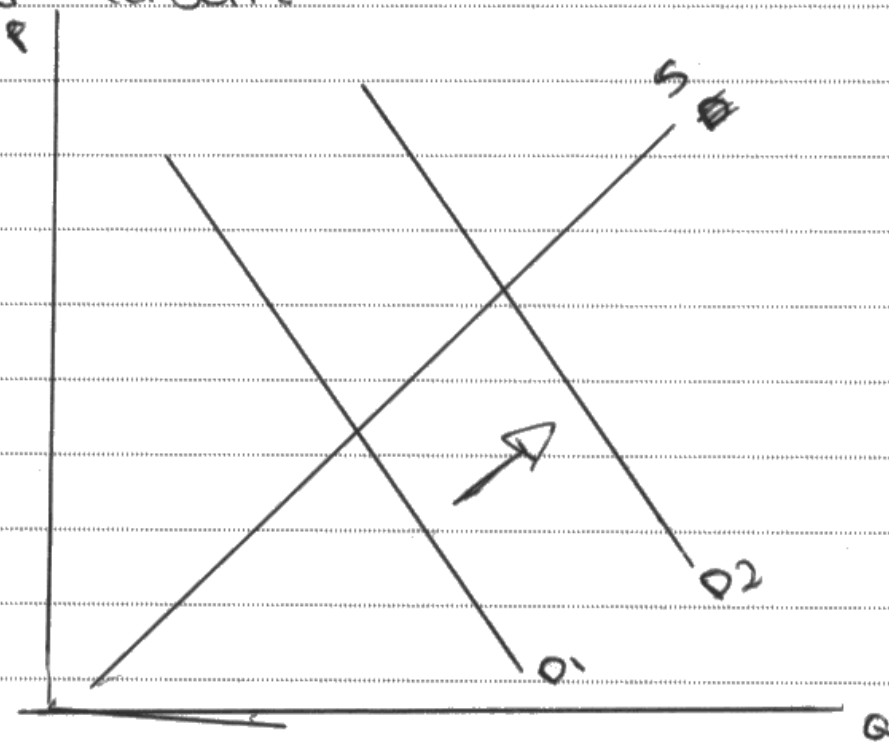
Write your answer here:

~~There~~ There are many ways in which the government could tackle the problem with the high rates of carbon emissions.

If the government were to set a limit on how much carbon emission is produced it ~~would~~ <sup>is</sup> likely ~~to~~ to help reduce the ~~production~~ amount produced.

This would be especially effective if the government were to introduce ~~large~~ <sup>large</sup> taxes ~~if~~ <sup>this</sup> if ~~this~~ limit was exceeded. This is because it ~~would be~~ wouldn't be financially beneficial for firms to go over the limit as they would have a ~~large~~ <sup>large</sup> ~~amount~~ amount of tax to pay.

Another way that the government could decrease carbon emissions is by granting subsidies to renewable energy resources to expand. By doing this it means that the amount of ~~total~~ renewable energy used will ~~be~~ increase as production will become cheaper and therefore firms will sell at a lower price giving the consumers more of an incentive to consume.

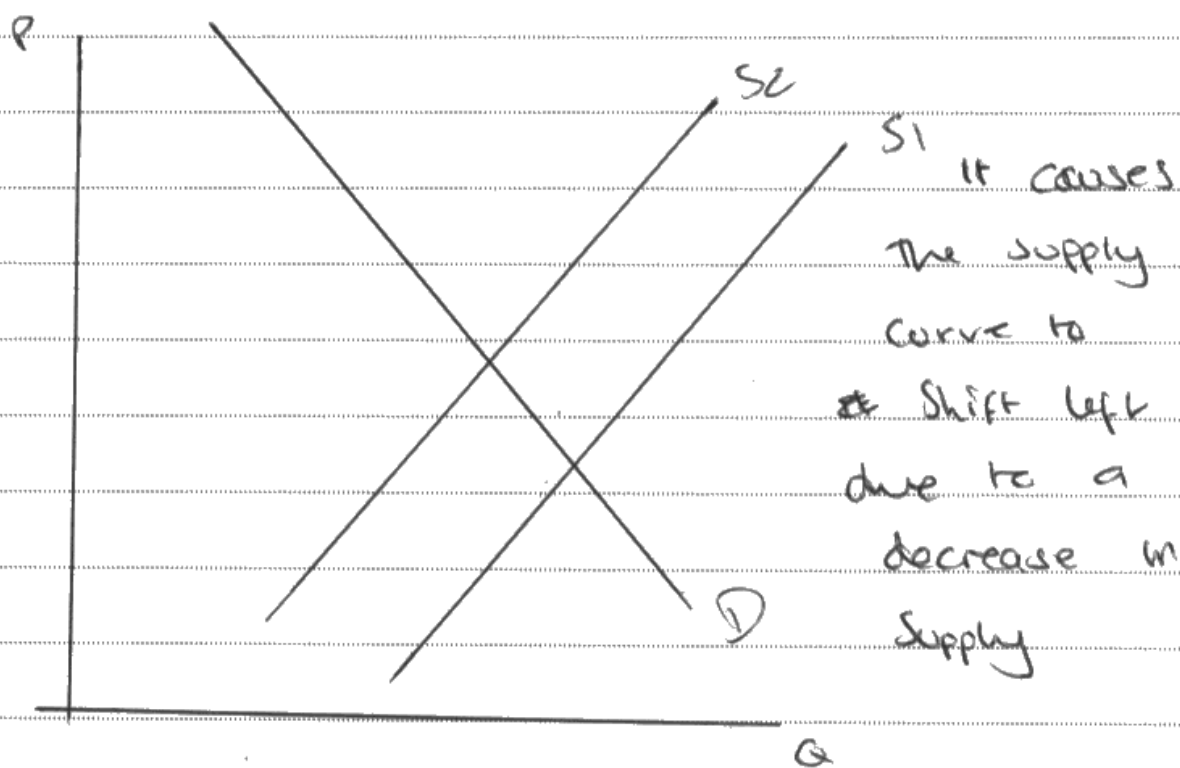


The demand curve will have a rightward shift as it increases because ~~the~~ rational consumers ~~to~~ will realise that by switching to ~~renewable~~ renewable energy it will be beneficial. ~~This~~ in reality however this may not occur due to

habitual behaviour as many <sup>consumers</sup> ~~people~~ will be happy to stay loyal to the energy supplier they are already with.

Another way the government could tackle carbon emission problems is by promoting and allocating firms low carbon technology, this would mean that firms could continue to produce at the same rate that they are and producing less emissions. This would be largely beneficial for both firms and the government as the firms are not losing out on any profits and the government are achieving a decrease in the emissions produced.

The government could also set a low price cap on the energy supplied causing the carbon emissions. This would give the producers less incentive to supply as they are no longer maximising profits as they are still having to pay the same amount to produce.



Due to this decrease in supply it means that less carbon emissions are produced as less products are being produced and therefore the government will achieve what they wanted.



This answer scored only 6 out of 20. There are three Level 2 KAA paragraphs. The question asks for a diagram, which the candidate has attempted on page 2, but this is an incorrectly drawn subsidy diagram and adds nothing to the candidate's answer. There is little development of ideas either analytically or in terms of context. On page 3 the candidate talks about promoting and allocating firms low carbon technology, but doesn't say what this is or how it might work in reality. There is no evaluation of the drawbacks of any policies proposed or which might be the more effective.



The question asks for different ways to be evaluated. This requires an assessment of the disadvantages of the policies proposed together with an assessment of which policy is best in the context of the extracts.

**EITHER**

(f) Using the concept of external costs, evaluate whether nuclear power is under-provided or over-provided in the energy market. Use an appropriate diagram in your answer.

(20)

**OR**

(g) Evaluate ways in which government intervention could be used to reduce carbon emissions. Use at least one appropriate diagram in your answer.

(20)

**Indicate which question you are answering by marking a cross . If you change your mind, put a line through the box  and then indicate your new question with a cross .**

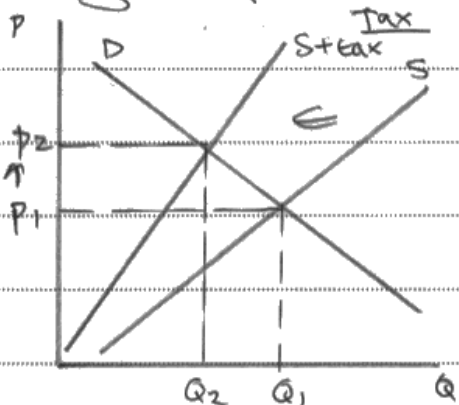
Chosen question number: **Question 6(f)**  **Question 6(g)**

Write your answer here:

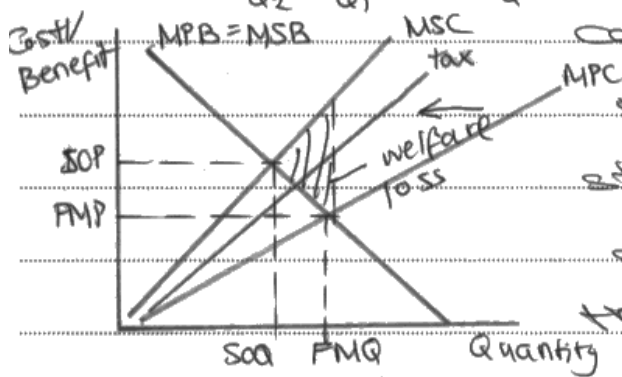
~~Extract C~~ Government intervention involves the influence of governments on the equilibrium price of a good/service often as a way to correct market failure by the free market, which is the misallocation of resources by the price mechanism. Schemes to reduce carbon emissions are explained in Extract C to be implementation of a tax, a tradable pollution permits scheme and subsidies to low-carbon technology. Whilst there might be effort to some degree, there are also set back to each of the relevant schemes. Carbon tax involves the levy of on producer based on the unit of carbon produced, which could be effort in reducing carbon emissions. This is because carbon emissions might be considered an external cost, which

is a negative externality to third parties.

A carbon tax might be efficient in reducing emissions because it increases firms' costs of production, which therefore limits their supply capacity, as demonstrated in the diagram below. This might therefore reduce



the impact of use of coal, gas and oil production in transport and energy production, which is outlined in Extract C, therefore



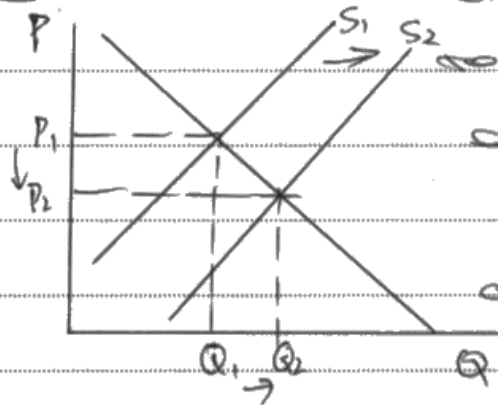
causing a market area of welfare loss, as demonstrated in the second diagram as well. However

the implementation of a carbon tax can act as a disincentive for producers to use greenhouse gas emitting sources of energy and instead encourage them to switch to more sustainable and environmentally friendly sources of energy, thus reducing the onset of climate change and reducing external costs as a result.

However, there are limitations to the use of a carbon tax scheme which should be

to be considered by government. This is because government failure can occur as a result of unintended consequences arising, such as tax evasion by firms. Some public sector energy providers might also be subject to be subject to regulatory capture, which therefore limits the effectiveness of the scheme as a result. Because it is also hard to measure carbon emissions, the tax scheme might therefore be rendered ineffective as a result.

Moreover, Extract C also references the fact that governments can 'support innovation and the deployment of low carbon technologies', which comes in the form of subsidies. Subsidies are grants given



to produce what help expand their supply by reducing costs of production which will therefore increase the

help to ~~attract~~ ~~attract~~ the supply more renewable energy sources such as solar, wind and tidal which are less likely to cause climate change. This will also act as a market if more available to consumers and therefore likely



to a fall in demand for greenhouse gas emitting sources of energy, which will reduce carbon emissions as a result. Whilst any research schemes might also be useful in making firms more efficient which will help them reduce carbon emissions in the long run, this also acts as an incentive for them to become more energy voluntarily friendly as well.

However, there are inevitable flaws that might arise from this, such as overdependency of producers and an opportunity cost to government who could use ~~public~~ subsidy cost to invest in better alternatives. It could also cause a distortion of price signals and arguably lead to a fall in equilibrium price, thus showing inefficiency as a result.

Extrat also referenced the use of a tradable pollution permits scheme, which might be efficient and it requires producers to pay in order to pollute because the measures their cost of pollution the right therefore act as a disincentive for firms to employ more

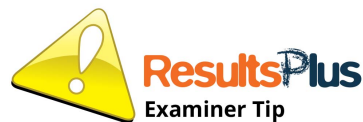
of production that will create pollution and this may be seen to switch to better and more environmentally friendly substitutes. Revenue ~~is~~ gained by governments from the scheme can also be invested into measures to reduce the external costs from carbon emissions such as flood defence.

However, a tradable pollution scheme is only likely to affect smaller producers since larger companies have the benefit of internalising their costs and purchase permits from smaller producers which is less costly. In reality, the scheme is an example of policy myopia a short term solution to a long term problem.

Because pollution is also difficult to quantify, government intervention to increase might be difficult to determine. Whilst policies such as a carbon tax, pollution permits and emissions trading might be effective in reducing emissions in the short run, in long run they are more likely to be ineffective in reducing emissions and its external costs.



This answer achieved 19 out of 20. The candidate begins by exploring carbon taxes and analyses thoroughly in context. There is then in-depth evaluation of the effectiveness of this policy, considering the possibility of government failure. The second policy considered is the subsidising of cleaner 'low carbon' technology, using a subsidy diagram, and explaining in context how the policy is likely to work. The candidate then evaluates by considering the opportunity cost of such subsidies and how they might distort the price mechanism. The candidate develops the essay further by exploring tradable permits and evaluates by considering whether the policy is effective in the long-term, seeing it as only a short-term solution to the problem. Each point is clearly balanced with good evaluative commentary. There is also some assessment of which policy might work best, though this is not developed fully.



Carefully crafted paragraphs, which use the context well, are clearly evident here. Notice how the points are evaluated before the next policy is introduced, explained, and again evaluated. There is a good attempt at a conclusion.

## Paper Summary

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

- On quantitative questions working should be shown, so that if an arithmetical error is made marks can still be awarded.
- Read the questions very carefully. Question 6(b) was misread by many candidates who went on to write responses discussing the price elasticity of demand rather than what the question required, which was a discussion of the price elasticity of supply of uranium.
- Candidates should provide logical chains of reasoning to develop their analysis and apply relevant economic theory and data to questions.
- In the 15-mark and 20-mark questions a limited number of points evaluated in depth is sufficient to access the top levels.
- Diagrams should be accurately drawn and would benefit from a careful explanation or evaluation of them.
- For top level evaluation in the essays 'sustained judgement' is required. Candidates would benefit from attempting to weigh up theory and the sufficiency of the data as they write, to offer clear and sustained judgement.

## 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>

