

AS LEVEL
Exemplar Candidate Work

ECONOMICS

H060
For first teaching in 2015

June 2016
Component 01
Microeconomics

Version 1



Contents

A GRADE CANDIDATE RESPONSES	3
Question 16a	3
Question 16bi	3
Question 16bii	4
Question 16ci	4
Question 16cii	5
Question 16d	6
Question 16e	7
Question 17	10
Question 18	14
B/C GRADE CANDIDATE RESPONSES	15
Question 16a	15
Question 16bi	15
Question 16bii	16
Question 16ci	16
Question 16cii	17
Question 16d	18
Question 16e	19
Question 17	22
Question 18	26
D/E GRADE CANDIDATE RESPONSES	33
Question 16a	33
Question 16bi	33
Question 16bii	34
Question 16ci	34
Question 16cii	35
Question 16d	36
Question 16e	37
Question 17	40
Question 18	44

A GRADE CANDIDATE

16a State what is meant by the term 'opportunity cost'

[1]

A opportunity cost is the next best alternative forgone as a result of a particular choice. ✓

Commentary on the answer

The definition is correct

1 mark

16bi Explain what is meant by the term 'price elasticity of demand'

[2]

Price elasticity of demand is the responsiveness of quantity demanded to a change in a goods price. It is calculated by the percentage change of quantity demanded divided by the percentage change of price. ✓✓

Commentary on the answer

The candidate has gained two marks in the first sentence because they have a clear understanding of the term 'price elasticity of demand'. The answer is precise because it uses two good key terms: 'responsiveness' and 'quantity demanded'.

2 marks

16bii Using information from the case study, calculate the price elasticity of demand for alcohol in Canada [2]

$$2: \frac{-16}{10} = -1.6$$



16% decrease

10% increase

Commentary on the answer

The candidate has correctly calculated price elasticity of demand. They have used the minus sign correctly, understanding the direction of change in price and demand.

Most candidates correctly calculated the PED figure but a notable proportion of candidates omitted the negative sign.

2 marks

16ci Explain what is meant by the term 'negative externality'. [2]

A negative externality is a cost to a third party that was not involved in the original transaction between the buyer and seller.

Commentary on the answer

The candidate has written a correct answer, recognising that an externality is a cost to a third party.

2 marks

16cii

Using information from the case study, explain how excessive consumption of alcohol leads to negative externalities

[4]

Negative externalities are borne by a third party. Excessive alcohol consumption leads to more crime and accidents, and so the cost of dealing with these, £385 million is borne by the Scottish government rather than being reflected in alcohol prices. This is a cost that is external to the consumer and so is a negative externality. Excessive alcohol consumption leads to health problems in the longer term, and so there is ^{an external} cost to the government for healthcare required to treat those who have developed illnesses through excessive consumption, and also from a fall in productivity.

Commentary on the answer

This candidate correctly identifies the cost (a rise in crime) and explains the consequences to a third party (Scottish government).

The question required candidates to identify both the cause of a relevant externality and the third party impacted. A number of third parties were highlighted in the case study material. The strongest candidates made effective use of the case study and explained precisely how the third party would be affected – as in this example.

4 marks

16d Using information from the case study, explain one reason which could account for the trend in alcohol consumption in Scotland from 1995 – 2007. [4]

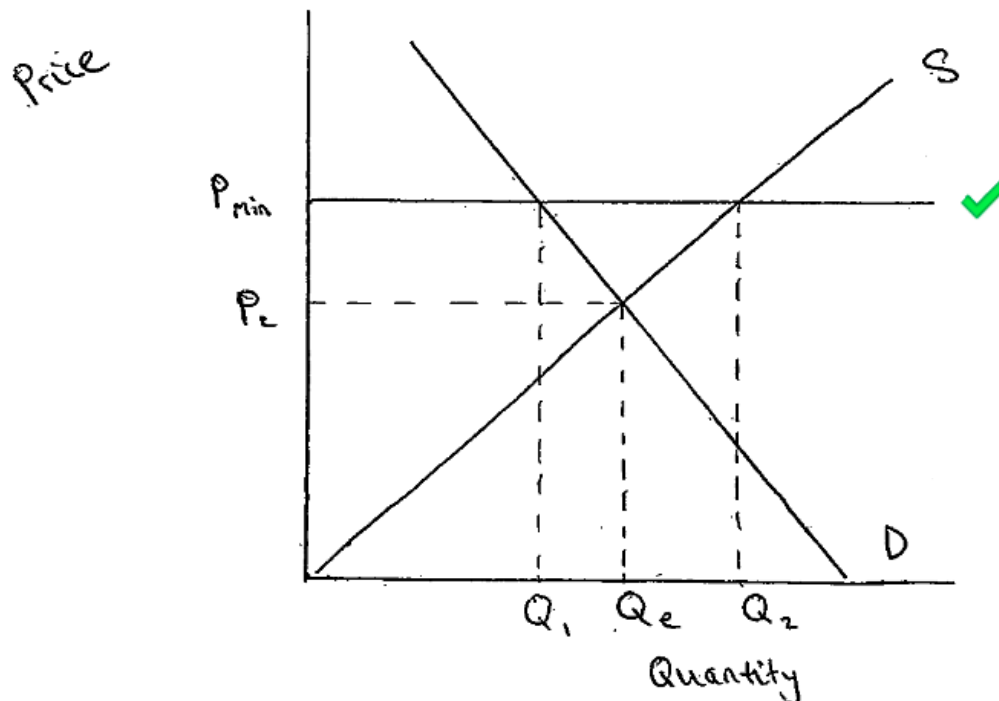
Alcohol consumption in Scotland may have increased due to the fact it ~~is more~~ takes up less income. Therefore it is cheaper proportionally ~~to~~ to income change. This means that as incomes have increased alcohol is consumed more because it is a normal good since its change in price hasn't been as large as change in income the demand for alcohol has ~~extended~~ ^{shifted} right so higher quantity is consumed.

Commentary on the answer

The strongest candidates used the following structure: identify the trend and explain the reason for the trend. This candidate identifies one of the two trends highlighted in the case study (lower relative prices for alcohol) and then gives a strong chain of reasoning using economic terms (normal good) that adds precision to their answer. The strongest candidates gave a chain of reasoning of the inverse relationship between price and quantity demanded or use understood (and used) the term 'normal goods'

4 marks

16e Comment, using an appropriate diagram(s), on the effects of imposing a minimum price for alcohol. [10]



A minimum price is ~~the~~ a regulation set by the government forcing the price of a good or service to be above its equilibrium price. For example, a minimum price on alcohol will create excess supply and a shortage of demand, above the equilibrium price for alcohol.

Firstly, the effects of imposing a minimum price on alcohol will cause quantity supplied to be at Q_2 . This means that there is

excess supply in the market ^{and} ~~but~~
 the market is in disequilibrium so cannot
 clear. However the quantity demanded will only
 be at Q_1 . Therefore there has been
 an extension in supply and a contraction
 in demand. The contraction in demand
 is because as price increases consumers
 demand less because it takes up
 more of their money. Since the market is
 in disequilibrium the government will have
 to buy up excess supply in order
 to maintain the price at p_{min} . Since
 alcohol produces negative externalities and
 is a demerit good the externalities
 have been internalised because consumers
 are now paying the full cost for
 alcohol so there will be less negative
 externalities like accidents as less people
 will be consuming alcohol. ~~the~~
 producers of alcohol will now be
 getting a better price for their goods.
 However since the price elasticity of
 demand is elastic they will lose
 revenue as demand will decrease
 more proportionally so they will lose

AN

AN

16e: ~~It~~ lose out as a result. Furthermore there is a very high opportunity cost for the government in buying the alcohol especially since it is likely to be destroyed. Moreover consumers will be paying significantly more than equilibrium price, therefore allocative efficiency is not being achieved in the market. As well as this firms know if they produce alcohol it will be bought by the government which means they will overproduce as a result too many resources will be dedicated to the production of alcohol and government expenditure will increase.

The conclusion minimum pricing isn't the best method to improve the market because the government ~~loses~~ ~~alot~~ has too high opportunity cost. Instead taxation should be used as this generates government revenue so will be more effective.

L3

Commentary on the answer

The diagram is correct; labelled clearly and correctly illustrates a minimum price. There is a clear chain of reasoning of the effect of a minimum price, making effective use of economic terms (excessive supply and a contraction in demand due to the price increase). There is also a good link between the minimum price and market failure – the candidate is directly answering the question. This provides good analysis as indicated by the two analysis annotations.

The evaluation is also good (as indicated by the two evaluation stamps) because it is fully explained.

Level 3: strong analysis and strong evaluation

10 marks

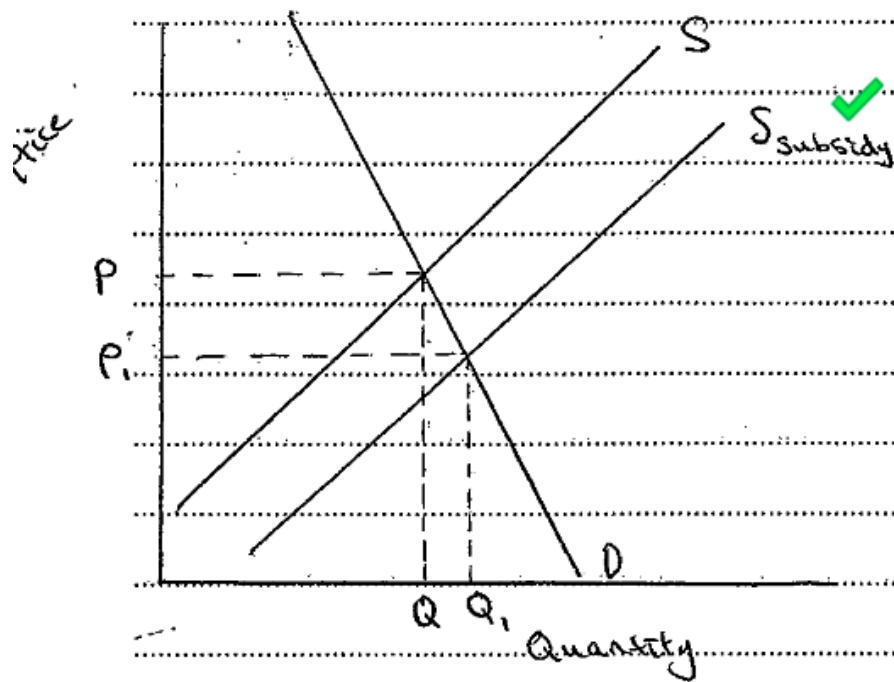
17 Wind farms generate renewable energy in the form of electricity. In 2015, government subsidies to wind farms were estimated to cost £1.1 billion.

Evaluate, using an appropriate diagram(s), the effectiveness of subsidies for wind farms as a method of correcting the market failure that results from the production of electricity. [20]

Subsidies are a fund paid ~~by~~ the government to firms producing ~~a~~ a product in order to increase its supply.

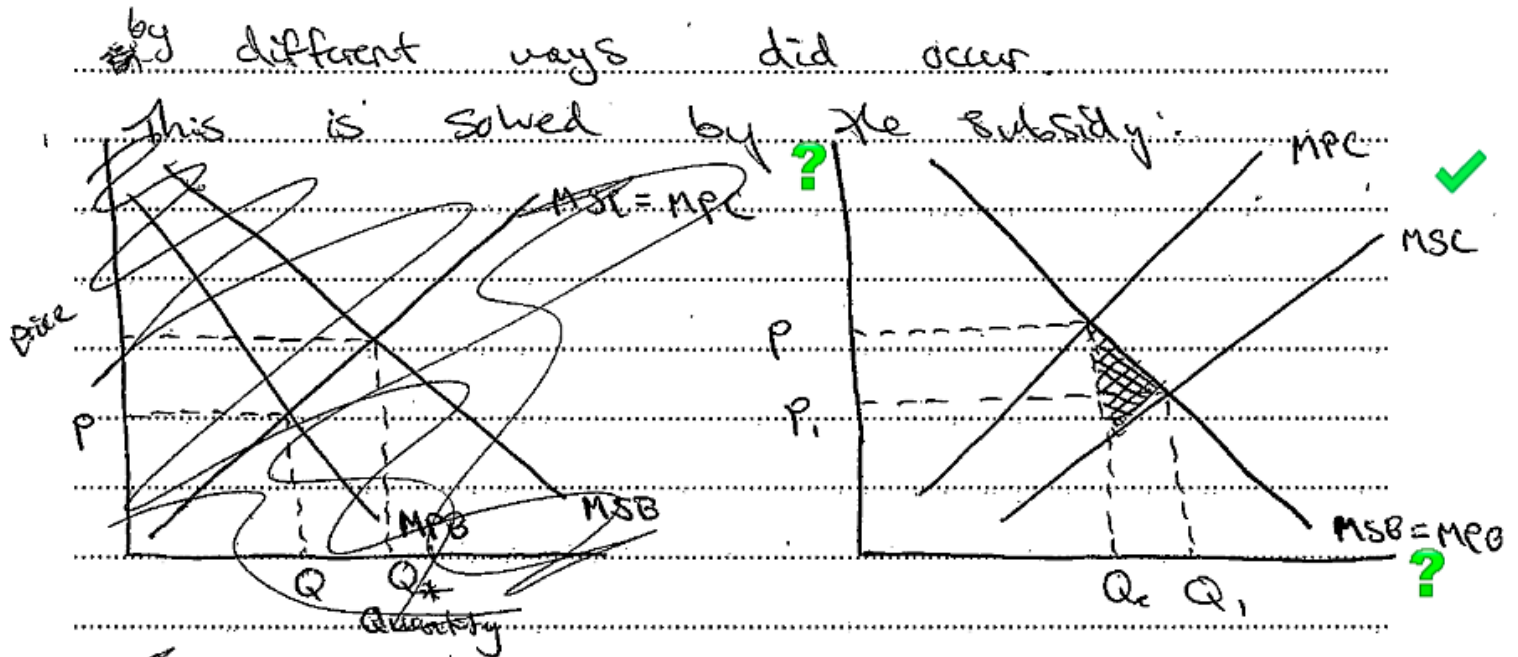
Market failure is when the free market fails to achieve allocative efficiency. For example the government subsidising wind farms should result in the increase in supply of electricity and thereby reducing its price.

Firstly this subsidy to wind farms will be effective because supply will shift left ~~right~~ because suppliers can use the money to pay off costs of production allowing them to reduce price:



This shows that the supply of electricity increasing should increase the quantity demanded because at a lower price more people will buy electricity produced

This solves previous market failure because the price was ~~too~~ high so since consumers were only consuming the private benefit they ~~to~~ there was underconsumption because they did not see the external benefits that is no contribution to pollution which normally occurs when electricity is produced from fossil fuels. Therefore allocative efficiency was not being achieved, ~~this~~ ~~subsidy should raise it~~ because society was not consuming at the socially optimum level, so positive externalities of production were not benefitted from and negative externalities of production of electricity



After the subsidy society will consume at where social benefit = social cost so the shaded triangle will be the welfare gained as a result.

On the other hand this subsidy will not be effective because the elasticity of demand for this electricity will play a large part because if it is inelastic the change in quantity demanded will be insignificant so

the subsidy could be seen as a waste. Moreover it will not be effective because if the extent of the subsidy is very small this will have very little shifting effect on supply so will not affect the market at all.

Also there is a possibility the firm doesn't increase supply instead just becomes more inefficient or it passes the money up to salaries.

END OF QUESTION PAPER

~~3*~~ or shareholders. This would mean the subsidy would take no effect as there would be no change in supply. Finally ~~the~~ there is a very high opportunity cost for the government which may arguably be spent more productively elsewhere in the economy.

In conclusion subsidies are an effective way in resolving the market failure that occurs however this is dependent on the fact that demand should be relatively elastic and that the price is reduced to a point where the price of wind electricity is close to electricity produced by other

means so ~~consumers will~~ choose

~~that~~ it is competitive. However

EVAL if these conditions do not occur

EVAL it will be ineffective as it will

EVAL be a very high opportunity

cost with not much reward.

L4

Commentary on the answer

The candidate uses a good structure, analysing the benefits of a subsidy (using a diagram) and then providing a counter argument that finishes with a supported judgement.

They start with definitions of a subsidy and market failure and then offer coherent analysis of the consequences of a subsidy fully embedded in the context of market failure. There is a slight error in the direction of the shift of the supply curve and the second diagram has missing labels but essays are marked holistically and the whole answer is strong enough to not be diminished by this. The first demand and supply diagram is correct and explained.

Their counter argument starts with a good phrase 'on the other hand' and there is a well developed line of reasoning which has a logical structure rather than just a series of independent statements.

In the final paragraph they provide a supported judgement that qualifies them for strong evaluation. The judgement is backed up by their previous analysis of price elasticity and opportunity cost.

Level 4: good knowledge, strong analysis, strong evaluation

20 marks

18 JJ Ltd, a small engineering company, is considering increasing its scale of production by expanding its current factory in Hereford. The alternative is to relocate the business to Coventry, which has better transport links and a pool of skilled labour. However, JJ Ltd would not be able to increase the scale of production in Coventry.

Evaluate, using an appropriate diagram(s), the relative costs and benefits of the two options facing JJ Ltd.

[20]

Very few candidates attempted Q18 and those that did rarely got past level 3.

B/C GRADE CANDIDATE

16a State what is meant by the term 'opportunity cost'

[1]

When a decision is made the next best alternative is forgone ✓

Commentary on the answer

The answer is correct

1 mark

16bi Explain what is meant by the term 'price elasticity of demand'

[2]

~~The measure in the responsiveness of quantity demanded~~ Measures the responsiveness of the quantity demanded ✓ when there is a change in price ✓ for a good or service ✓ when there's a change in price ✓

Commentary on the answer

The answer is correct: the candidate uses both terms 'responsiveness' and 'quantity demanded'.

2 marks

16bii Using information from the case study, calculate the price elasticity of demand for alcohol in Canada [2]

$$PED = \frac{\% \Delta Q^d}{\% \Delta P} \quad \therefore \quad PED = \frac{-16\%}{10\%} = -1.6$$

Commentary on the answer

The candidate correctly calculates the answer

2 marks

16ci Explain what is meant by the term 'negative externality'. [2]

The cost ~~exposed~~ experienced by a third party as a result of an economic transaction.

Commentary on the answer

The candidate correctly identifies that there is a cost and that it is to a third party.

If they had said that the cost was to society rather than to a third party this wouldn't have been credited (as per the mark scheme).

2 marks

16cii

Using information from the case study, explain how excessive consumption of alcohol leads to negative externalities

[4]

Excessive consumption of alcohol leads to negative externalities such as healthcare problems because it leads to knock ^{others in} consequences for ~~families~~ ^{others in} society. Lost productivity in the workforce brings extra variable ~~and communities~~ ^{costs of production to employees} and an increase in crimes, burden ~~such as developing cancer or liver disease~~ ^{example} the police force and the courts. For ^{example} criminal justice and emergency services (due to increased accidents), ~~there is~~ ^{have} an extra 385 million pound cost. ~~This~~ This means that there is an external cost and means that others in society that may require the services more, will be pushed aside. This is particularly important for the external costs arising for the NHS. Other negative externalities include a 820 million pound ^{extra} cost on productivity, which may lead to problems in the economy.

Commentary on the answer

This candidate has identified the cause of the negative externality (lost productivity) and then goes on to provide two points of explanation (costs of production to employers and the cost to the NHS). They could have gained the fourth mark by adding that the additional cost to emergency services means that there is less available to spend in other areas.

The answer is longer than it needs to be – it is important for candidates to understand the benefits of being concise.

3 marks

16d Using information from the case study, explain one reason which could account for the trend in alcohol consumption in Scotland from 1995 – 2007. [4]

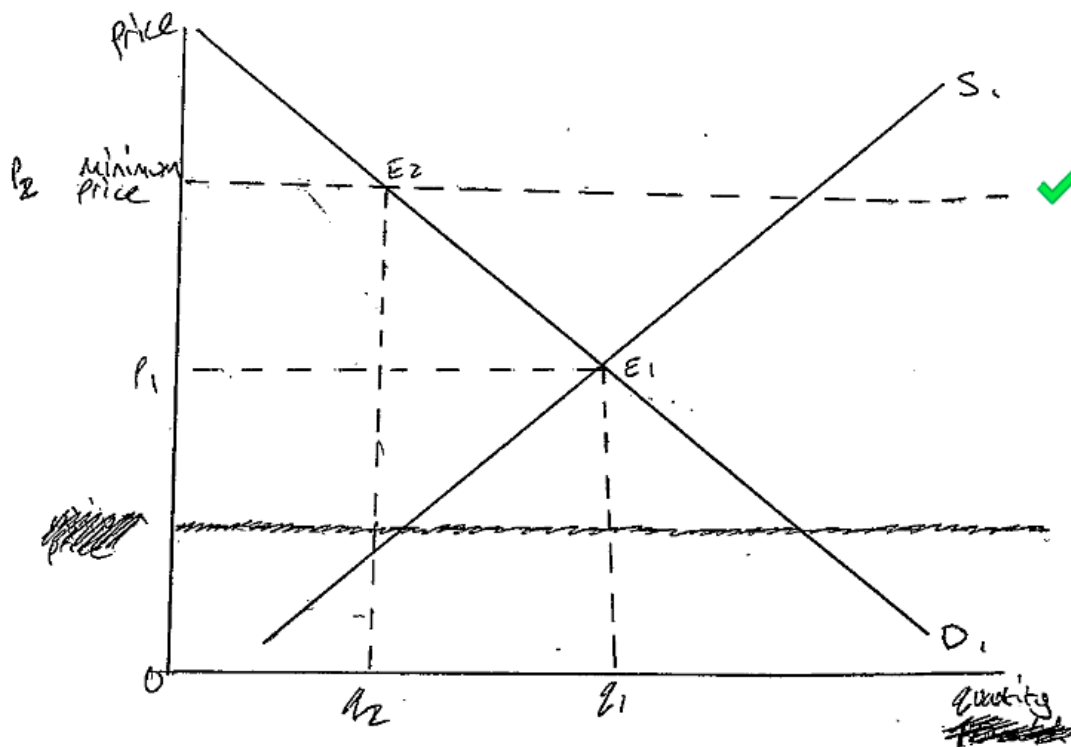
The prices of alcohol may have slightly decreased. As the price decreases the demand for the product will increase resulting in more consumption of alcohol.

Commentary on the answer

The candidate identifies the trend (prices have fallen) but their reason for the trend is too vague, there is no clear economic explanation for the trend.

1 mark

16e Comment, using an appropriate diagram(s), on the effects of imposing a minimum price for alcohol. [10]



A minimum price means that the government chooses the minimum price for a product. This means the product cannot be sold below this price. The minimum price level shown on the graph increases price from P_1 to P_2 . This increase in price means that quantity traded decreases from Q_1 to Q_2 . A new equilibrium is formed as equilibrium moves from E_1 to E_2 .

One advantage of setting a minimum price level on alcohol is that the consumption of alcohol will decrease. Many people with

lower incomes will be priced out of buying alcohol altogether due to the new higher price. However the effectiveness of a minimum price is dependent on how high the minimum price is set.

One disadvantage of setting a minimum price level on alcohol is that some people are addicted to alcohol (alcoholics). Many alcoholics would pay whatever price they have to to get alcohol. This would mean the consumption would not decrease as much as planned. ~~Therefore the effectiveness of a minimum price~~ In this case the minimum price would lead to low income ~~alcoholics~~ alcoholics resorting to crime to get alcohol.

Another disadvantage to setting a minimum price level is that different types of alcohol have different prices. If the price of beer increased then the consumer may just switch to a cheaper, inferior brand of beer.

~~The~~ In conclusion the effectiveness of a minimum price level will depend upon how high the minimum price level is set.

Commentary on the answer

The diagram is mostly correct although excess supply isn't fully indicated.

There is correct analysis of the effectiveness of a minimum price through series of single links, the candidate explains the change in price on quantity traded but doesn't go on to connect this with excess supply or market failure to add more economic analysis to their response.

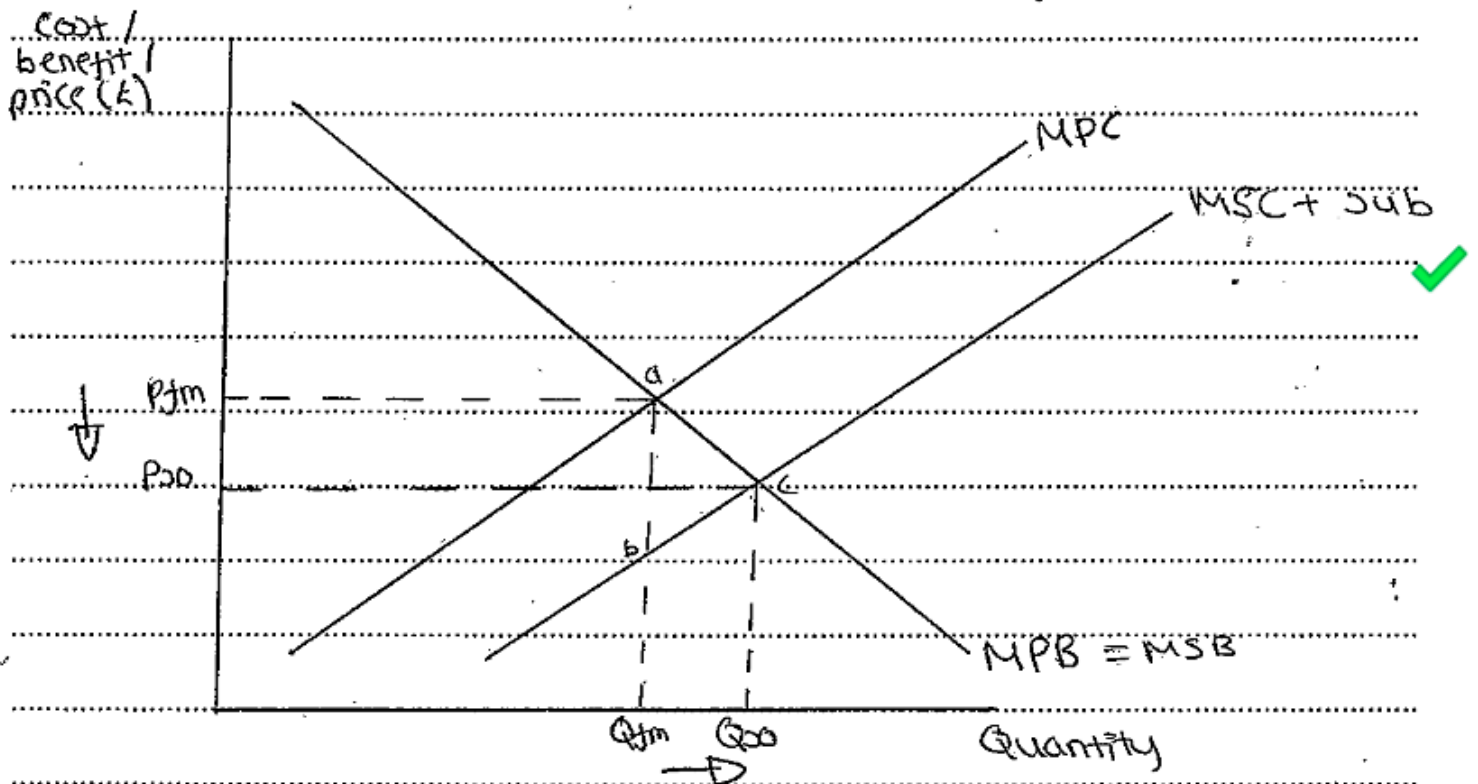
Evaluation is reasonable as one counter argument relevant to market failure is provided. The answer was considered to have (just) good analysis and reasonable evaluation therefore it doesn't fully access level 3 and is put at the top of the next level down (level 2).

Level 2: 6 marks

17 Wind farms generate renewable energy in the form of electricity. In 2015, government subsidies to wind farms were estimated to cost £1.1 billion.

Evaluate, using an appropriate diagram(s), the effectiveness of subsidies for wind farms as a method of correcting the market failure that results from the production of electricity. [20]

A subsidy is a payment made by the government to firms in order to help lower their costs.



The diagram shows how a subsidy would reduce the cost of wind turbines from P_{jm} to P_{so} . This is due to the MPC curve shifting to the right to the curve $MSC + sub$. This also creates an increase in output from Q_{jm} to Q_{so} as firms are able to produce more products. The wind farm is now operating at its socially optimum level of output, where the marginal private benefits are equal to the marginal social costs. By implementing a subsidy the welfare loss of a, b, c will be eliminated. Also reducing the negative externality.

A subsidy is an effective method as it allows firms to continue producing goods and therefore improving the satisfaction of consumers.

However, by the government providing subsidies they are making it easier for inefficient firms to stay productive. This will have negative effects on the economy in the long run as these businesses will require continuous subsidies. The subsidy will allow inefficient businesses to cover their costs and continue to produce.

Another problem is the government face an opportunity cost when deciding to subsidise things like wind farms. For example the £1.1 billion spent on wind farms could have been spent on other things like education or healthcare.

As well as this the government are also given imperfect information. This will make it difficult to decide the size of the subsidy, as too little of a subsidy may have no effect and the negative externality will remain. Therefore the effectiveness of the subsidy depends on the size of it.

Overall, a subsidy can be an effective way to correct market failure. This is because it increases the output of firms and decreases production costs. However there is an opportunity cost of subsidising and the resources might be more effective elsewhere. A solution to this would be to combine subsidising wind farms with an indirect tax on the production of electricity.

This will allow the government to fund the subsidy with the revenue they generate from the indirect tax.

EVAL
EVAL

L4

Commentary on the answer

The candidate begins well by defining subsidies and providing a correct diagram that is explained. There is a clear link to market failure through the recognition of the socially optimum level of output and that the welfare loss will be eliminated.

Their evaluation is good – there are a number of counter arguments but they are not clearly connected. The final point about indirect tax would have been stronger if they had previously discussed this as an alternative policy within the main bulk of the essay. The judgement isn't sufficiently supported.

The candidate just tips into level 4, their evaluation isn't strong but the analysis is sufficient for level 4 and as a whole essay it qualifies for level 4.

Level 4: good knowledge, strong analysis, good evaluation

16 marks

Q18 JJ Ltd, a small engineering company, is considering increasing its scale of production by expanding its current factory in Hereford. The alternative is to relocate the business to Coventry, which has better transport links and a pool of skilled labour. However, JJ Ltd would not be able to increase the scale of production in Coventry.

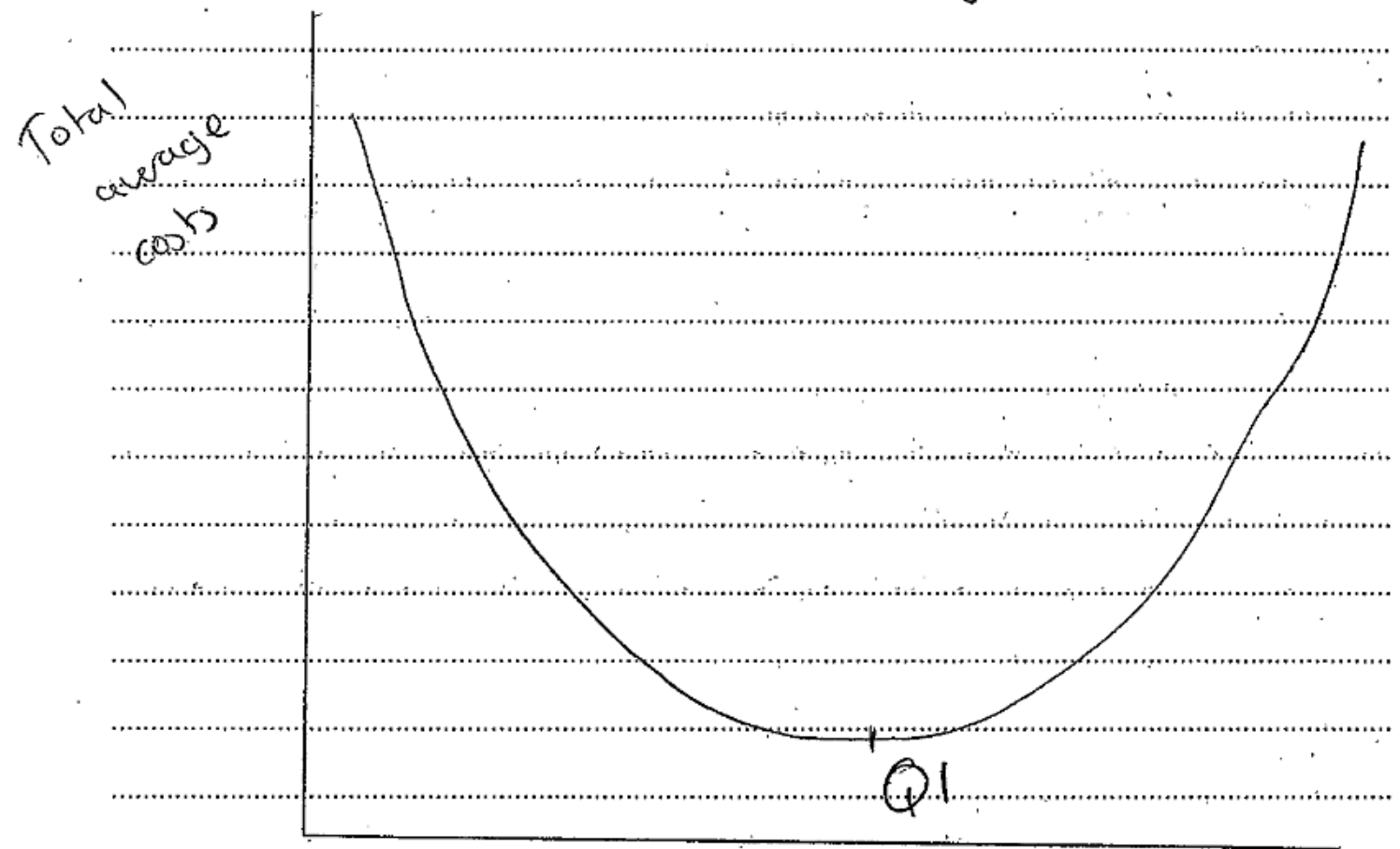
Evaluate, using an appropriate diagram(s), the relative costs and benefits of the two options facing JJ Ltd.

[20]

Economies of scale are how a business is affected when the scale of production increases, and how its average total cost will either decrease as economies of scale or increase with diseconomies of scale.

JJ Ltd, staying in Hereford would have many benefits to their business, for example they will be able to expand their current factory. This means that their scale of production will be increased which in turn means that they will experience a lower average total cost, this economies of scale will have many benefits, as it means that they will be a productively efficient business as they are working with optimum output at the lowest possible costs.

this is shown in the diagram below.



In the diagram above the J Ltd will real output be working at $Q1$ where they are productively efficient, as they can not reduce average costs any lower without increasing their current output, and sale of production.

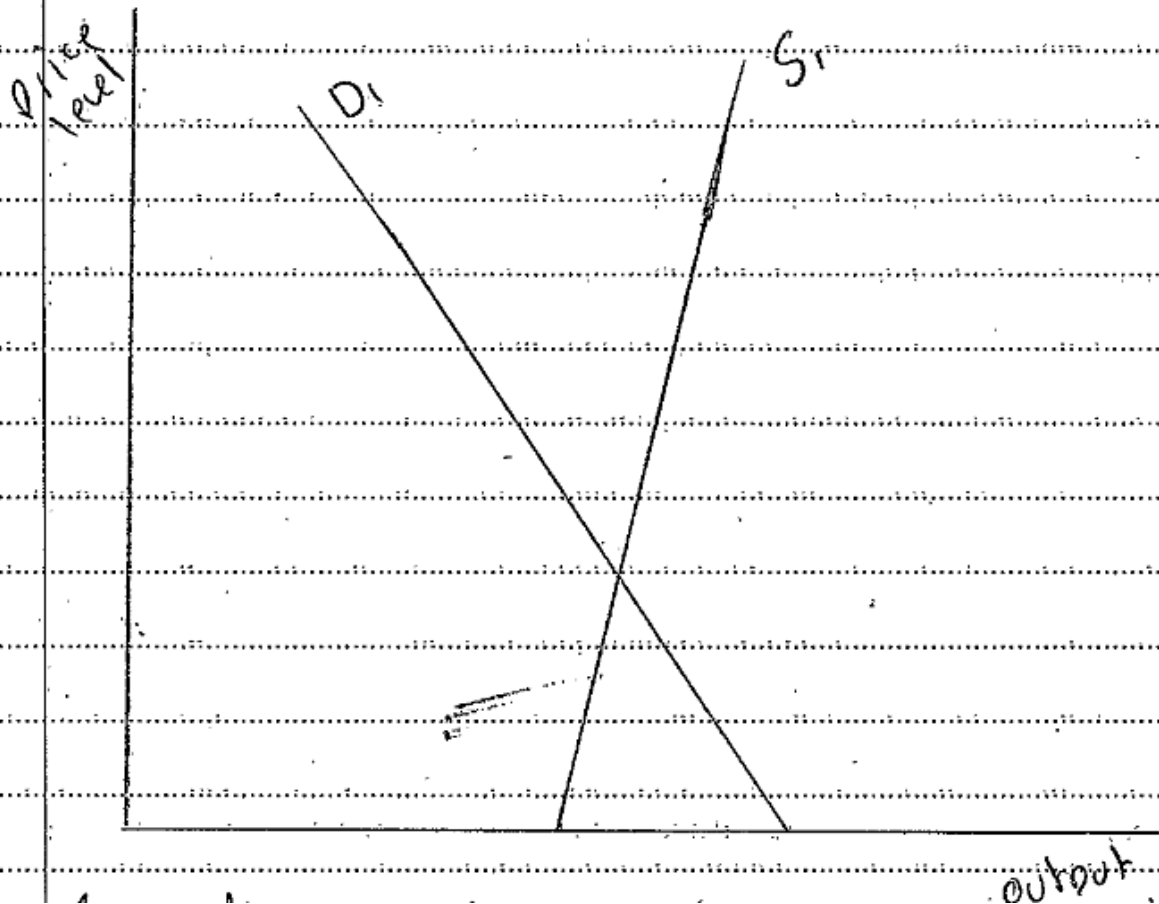
However, the drawbacks of staying in Hereford are, if they are to expand, then they may face occupational immobility of labour. This means that if they need to recruit more staff, then they will be unable to do so, this will be because ~~people~~ ^{workers} who may be interested in their business, may lack the necessary skills to be able to work in their environment, which means they may be increasing their ~~factory~~ ^{factory} size, but may not be able to increase their scale of production if they are unable to find the ~~adequate~~ ^{adequate} workers to meet their needs.

On the other hand, if JJ Ltd decide to move their factory to Hereford, then they will gain many benefits from this, such as ~~the~~ ^{the} sustaining better transport links, this means that JJ Ltd, can potentially trade ~~and~~ ^{and} with other business, whilst improving their own with potentially, faster and more efficient links, meaning they can have more time to improve their business plans and ~~invest~~ ^{invest} equipment or technology.

Another benefit to JJ Ltd would be that, if they move to Coventry then they will be a greater pool of skilled workers, meaning that they will have a wider range to choose from when recruiting new staff etc, as they will not be experiencing ~~and~~ any occupational immobility of labour.

Oppositely if JJ Ltd do decide to move to Coventry, then they may face a few drawbacks, such as, they will not be able to increase their scale of production, this may affect them massively as if the demand increases then they will be unable to meet the necessary supply causing a

Q18 disequilibrium, where the demand is greater than supply.



The diagram shows that as the demand ^{curve} increases, the supply cannot match this sudden increase in demand, causing the business to ~~lose~~ potentially lose customers and sales as they cannot meet their ^{customers} needs and wants, which is the basic economic problem.

Another negative is that JJ Ltd, when moving may experience Geographical immobility of labour, meaning that previous employees may be forced to leave as they are unable to move to a new location to carry on with their job, which will cause the production process to further decline if they do not have enough employees.

Personally I believe that JJ Ltd, should stay in Meethard, this is because they have the option to increase their scale of production, leading to a decrease in average costs potential, they do not run the risk of losing employees and also they will be able to be constantly improving without potential errors occurring from their ~~activities~~

~~new links~~ ~~links~~

new links which may be unreliable and costs JJ Ltd, lots of money from poor communication between buyers etc.

Commentary on the answer

The candidate starts well by defining economies of scale and there is a clear sense that the candidate understands the concept of economies of scale as demonstrated by the correct diagram and explanation – the explanation refers to relevant terms: lower average costs and greater productive efficiency.

They then go on to address the disadvantages of remaining in Hereford. This was good practice. The better candidates that answered this question addressed both sides of the argument for Hereford and then for Coventry, as this candidate does.

However, their answer isn't coherent enough and doesn't make sufficient use of economic concepts to go further than reasonable analysis and evaluation. There is a lot of repetition of arguments (efficiency and occupational mobility) and their judgement doesn't weigh up both sides.

Many candidates misinterpreted this question and weren't confident enough in the topic to fully address it for 20 marks.

Level 2: reasonable knowledge, reasonable analysis reasonable evaluation

10 marks

D/E GRADE CANDIDATE

Q16a State what is meant by the term 'opportunity cost'

[1]

The next best alternative forgone after a choice is made. ✓

Commentary on the answer

The definition is correct.

1 mark

Q16bi Explain what is meant by the term 'price elasticity of demand'.

[2]

How responsive price is to a change in demand and vice versa. ✗

Commentary on the answer

The candidate has confused the causal relationship.


0 marks

Q16bii

Using information from the case study, calculate the price elasticity of demand for alcohol in Canada

[2]

10%
16%

$$PED = \frac{10\%}{16\%} = 1.6\%$$


Commentary on the answer

Zero marks for an answer which uses a percentage sign, for example '1.6%'. However, candidates could still get one mark for -16%/10% if they showed their working (notice they need the minus 16).

0 marks

Q16ci

Explain what is meant by the term 'negative externality'.

[2]

When the marginal benefit is
 Negative external costs that come with
 consuming/producing a product or service. ✓

Commentary on the answer

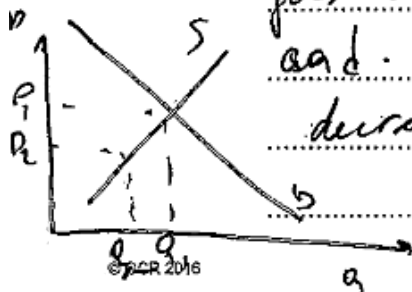
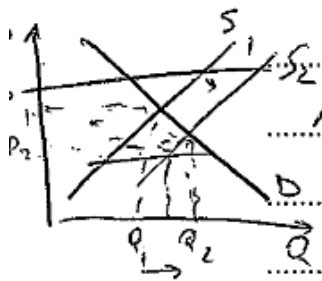
The candidate understands that there are costs but there is no understanding of a third party.

1 mark

Q16cii

Using information from the case study, explain how excessive consumption of alcohol leads to negative externalities

[4]



As we can see from the case study, to reduce the problems caused by the excessive consumption of alcohol is to introduce a minimum price for alcohol. That means that if price goes down this product becomes more inferior and the quantity of these products will decrease.

NAQ

Commentary on the answer

This candidate doesn't address the question; they're providing answer to Q16e.

0 marks

Weaker candidates struggled to differentiate between private and external costs. A number simply provided direct quotes from the case study with no interpretation and development.

Q16d Using information from the case study, explain one reason which could account for the trend in alcohol consumption in Scotland from 1995 – 2007. [4]

One reason for the trend ~~of~~ in alcohol consumption is ~~that~~ information failure. This means that people ~~didn't~~ perceive the ~~full~~ costs of consuming excess amount of alcohol. ~~As~~ As a result, ~~many~~ many people overconsumed it which lead to the generation of many negative externalities such as domestic violence and car accidents.

Commentary on the answer

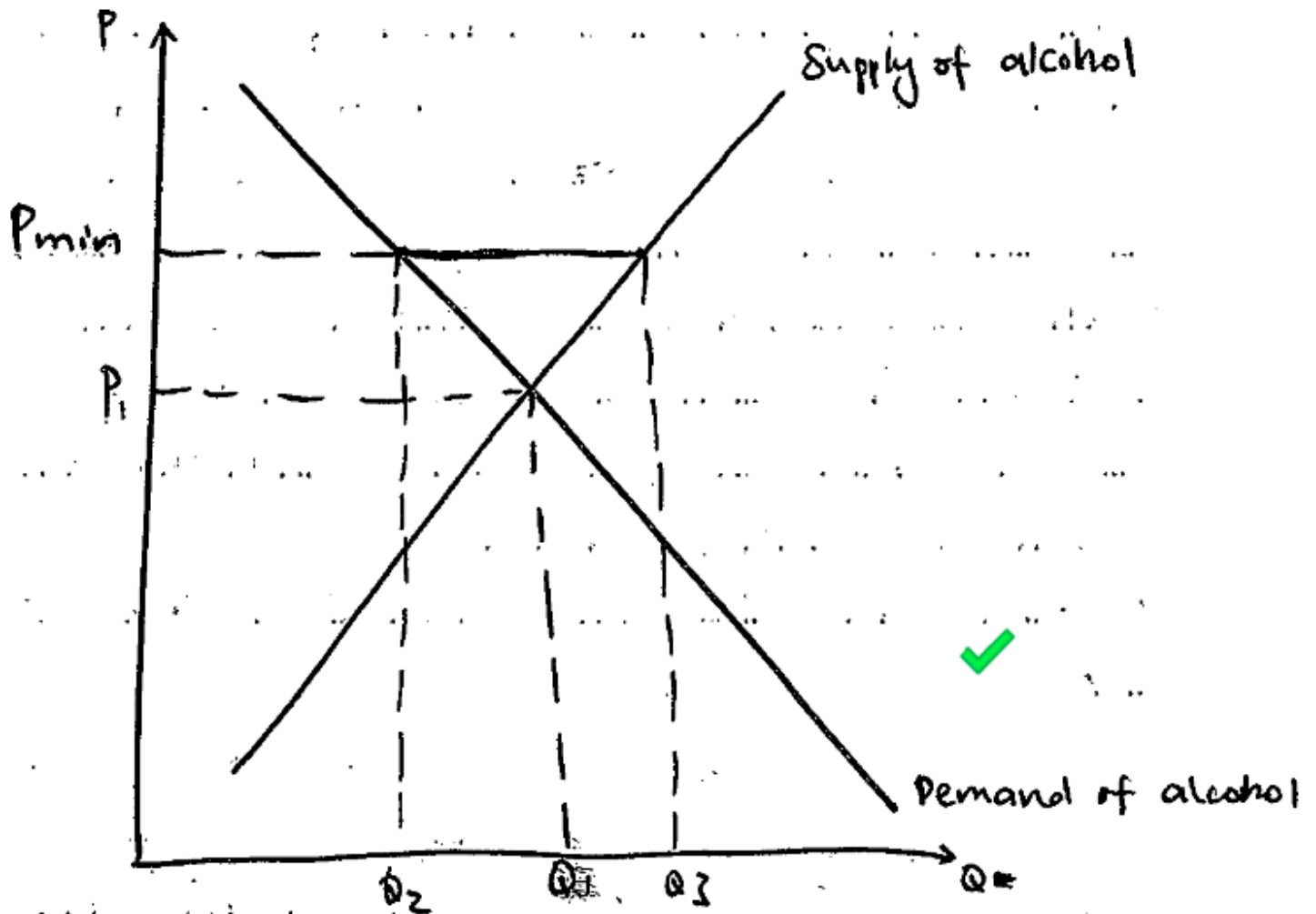
The candidate hasn't correctly identified the trend, this was either a change in relative price or in incomes therefore they aren't able to receive any marks for their explanation.

0 marks

Q16e

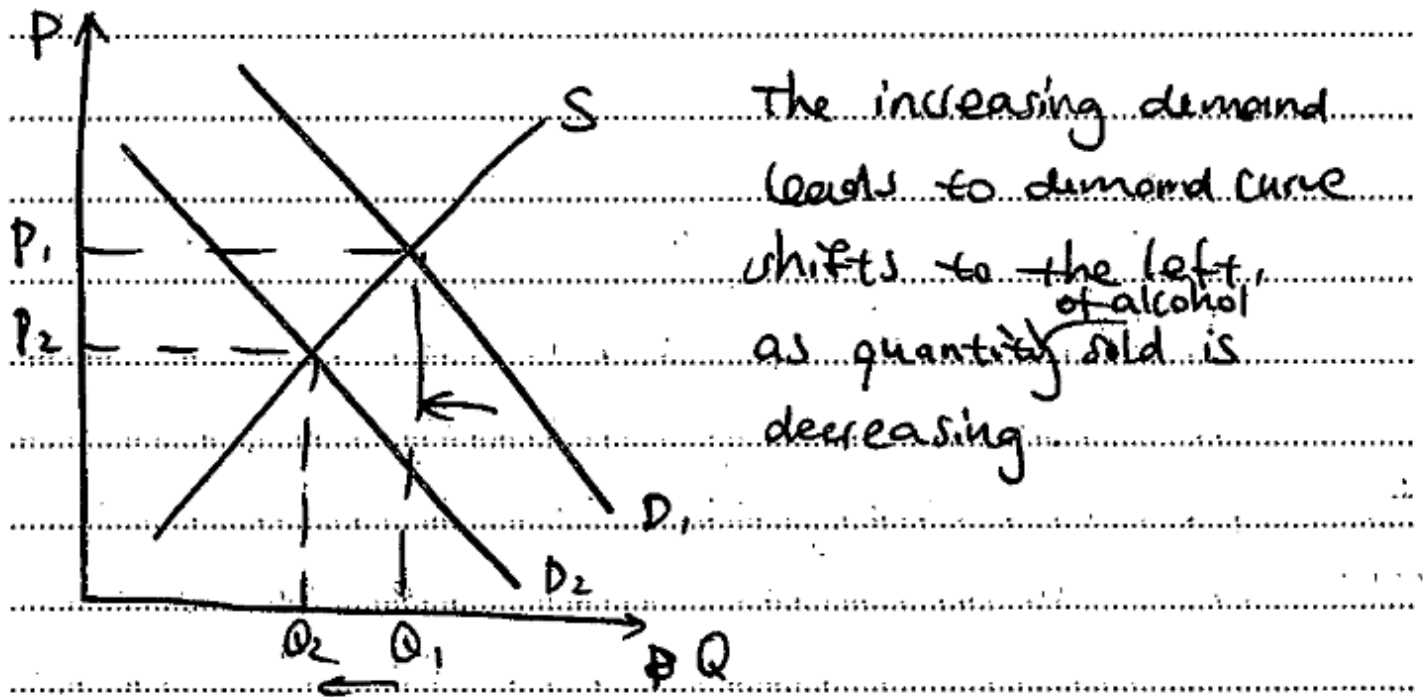
Comment, using an appropriate diagram(s), on the effects of imposing a minimum price for alcohol.

[10]



A minimum price is a price set by the government or related regulator to prevent the free market price from falling ^{below a certain price level} ~~too low~~. It is a government intervention intended to maximise social welfare, and the minimum price must be set above the equilibrium price level (P_e) to be effective.

Alcohol is a de-merit good and it leads to negative consumption externalities, as marginal private benefit is higher than marginal social benefit which leads to over-consumption. To address the problem of over-consumption, as prices of alcohol \uparrow is increasing. ~~The result is~~ The minimum price result excess supply, hopefully the falling consumer demand will lead to falling supply of alcohol based on basic demand ~~up~~ and supply curve theory. As less consumption of alcohol, it helps marginal private benefit curve to shift to the ^{left} ~~left~~ to match the marginal social ~~benefits~~ benefits which improve social welfare ~~as~~ and solve the problem of market failure. So in this case, the use of minimum price is effective.



Commentary on the answer

The candidate has drawn the correct diagram but it isn't awarded marks unless there is a correct explanation to accompany it. The answer starts encouragingly with recognition that the minimum price must be above the equilibrium price. However, it then loses focus by not explaining the reason for the equilibrium price and going on to concentrate on a shift in demand rather than addressing the effectiveness of minimum pricing.

Level 1: limited analysis and no evaluation

2 marks

Q17 Wind farms generate renewable energy in the form of electricity. In 2015, government subsidies to wind farms were estimated to cost £1.1 billion.

Evaluate, using an appropriate diagram(s), the effectiveness of subsidies for wind farms as a method of correcting the market failure that results from the production of electricity. [20]

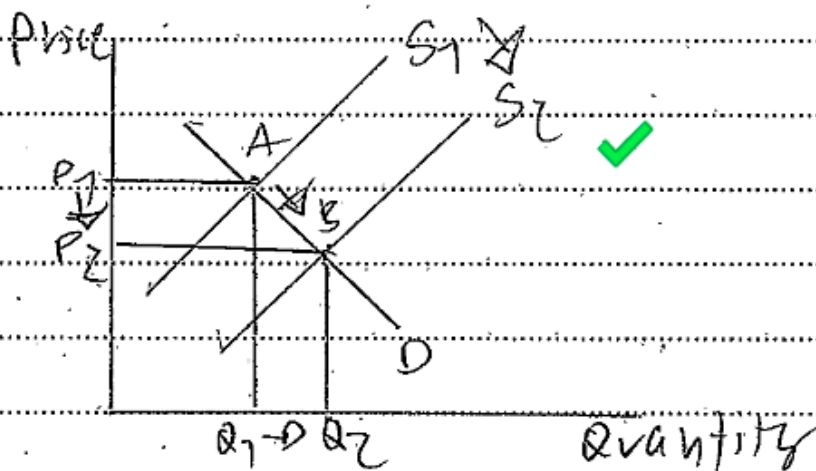
Question no. 17

Renewable Energy

Wind farms are merit goods since they produce positive externalities. Which means that the social marginal benefit (renewable energy, less pollution, ...) is higher than the private marginal benefit (cheap energy). Therefore wind farms are underconsumed and underproduced. Therefore there is currently a market failure as since not all positive externalities are used and consequently there is a potential welfare gain in using wind farms as a source of renewable energy. ✓

In order to correct ^{the} market failure the government subsidises wind farms as a result (diagram 1)

the government ¹⁴ ~~supply shifts~~ gives an incentive to producers to use more wind farms. As a result supply shifts to the right from S_1 to S_2 . This leads to an ~~increase~~ decrease in price from P_1 to P_2 . Therefore the consumer surplus ~~there~~ (diagram 2) increases from P_1, P_2, A to P_1, P_2, B . Due to that ~~the~~ (diagram 1+2) the quantity demanded increases from Q_1 to Q_2 . Consequently ~~the market under~~ consumption (diagram 1) the underconsumption and underproduction and therefore the market failure got corrected.



From Q_1 to Q_2 . Consequently the ~~market~~ underconsumption (diagram 1) the underconsumption and underproduction and therefore the market failure got corrected.

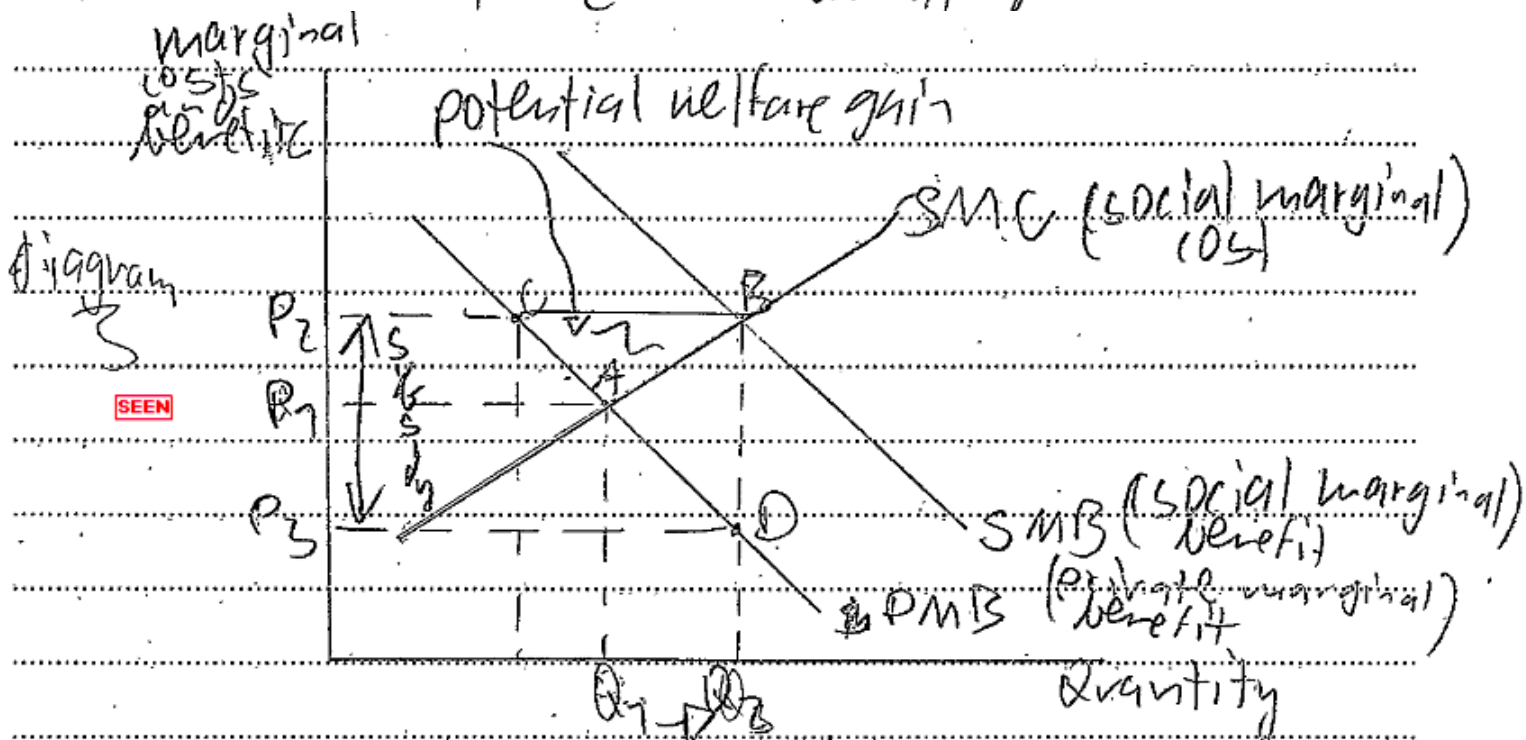
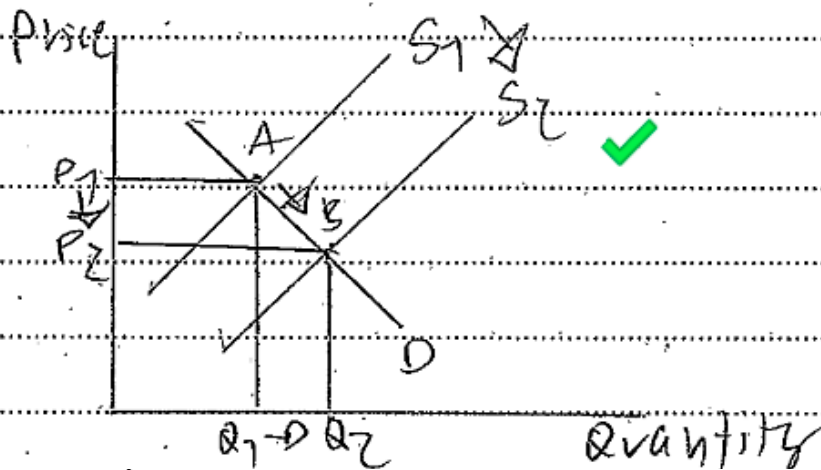


Diagram 3 A natural market operating. P_2 the price the producer gets for supplying renewable energy wind

Exam. P_1 price consumer needs
to pay for the energy.

P_2 to P_3 size of the subsidy.

ABC potential welfare gain
if renewable energy / wind farms.

How BA benefit is that there is
less pollution from factories etc.

as well as its more sustainable.

AN

AN

However it costs much more.

L2



PP cost

Commentary on the answer

The candidate takes quite a long time getting into their analysis, a lot of the beginning of the answer is spent explaining market failure which is only AO1 (knowledge and understanding). Once they start to analyse the consequences they use a correctly labelled diagram and there is reasonable analysis of the change in price, quantity and the impact on under-consumption and under-production. The candidate then repeats their analysis that doesn't add anything to their answer.

There is a hint of evaluation at the very end. The (reasonable) analysis is sufficient to pull the answer into mid level 2 despite the limited evaluation as essays are marked holistically.

Level 2: 8 marks

Q18

JJ Ltd, a small engineering company, is considering increasing its scale of production by expanding its current factory in Hereford. The alternative is to relocate the business to Coventry, which has better transport links and a pool of skilled labour. However, JJ Ltd would not be able to increase the scale of production in Coventry.

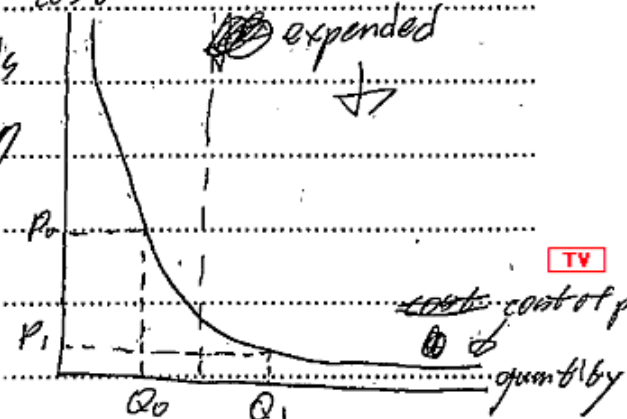
Evaluate, using an appropriate diagram(s), the relative costs and benefits of the two options facing JJ Ltd.

[20]

Scale of production is defined by ~~is~~ if the firm is big enough, increasing the number of goods ~~is~~ ~~such as~~ ~~such~~ ~~such~~ it produce, will lower down the cost of production on each good.

BOD

Firstly, expanding its current factory in Hereford is good as ~~it~~ it will allow cost the firm to supply more goods at a lower price, it will bring them a comparative advantage ~~is~~ to other small company, as shown in the diagram, as they produce more, from Q_0 to Q_1 , the price go down from P_0 to P_1 .



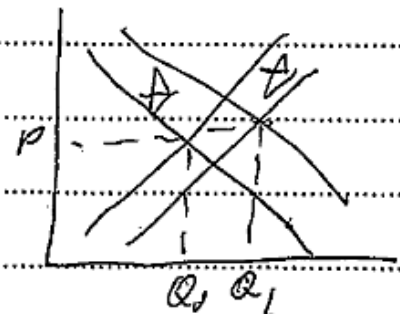
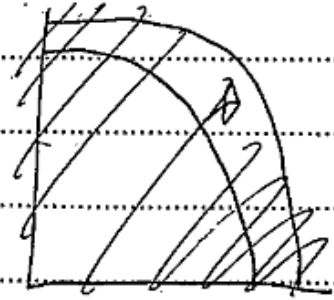
TV

✓ Which allow them to supply their ~~service car~~ business to larger company, and allow them to ~~make~~ step in the bigger market.

~~Whats more is staying in Hereford will be~~
But if they failure to expand their economics of scale, it will bring them a be bigger cost as the process of expanding their ~~business~~ scale may bring damage to their old machinery, those machine can't be sold anymore, that may lead to a big loss. And cost them to fall, as they are small company, they might not have enough money to restroe new equipment as a large budget had already spent on expanding.

On the other hand, relocate the business to Coventry is good as it has good transport links and they can employ the skilled labour which both can improve the productive efficiency, which mean it will gain a improvement in their

✓ resource. As transport are more easy, they can sell their good to a larger group of ~~diff~~ consumers which will cause the demand to ~~shift~~ demand and supply to shift to the right.



It got bad effect as new workers are not familiar to their ~~new~~ production process.

11

Commentary on the answer

The candidate has limited understanding of the concept of economies of scale and is given benefit of the doubt in their definition. They appreciate the consequence for price and that the company will be able to sell to a larger market however there isn't any economic analysis of the counter argument.

The final paragraph includes some attempt to address the merits of moving to Coventry but again, without any economic analysis of the arguments.

Level 1: limited knowledge, limited analysis, limited evaluation

5 marks



We'd like to know your view on the resources we produce. By clicking on the 'Like' or 'Dislike' button you can help us to ensure that our resources work for you. When the email template pops up please add additional comments if you wish and then just click 'Send'. Thank you.

Whether you already offer OCR qualifications, are new to OCR, or are considering switching from your current provider/awarding organisation, you can request more information by completing the Expression of Interest form which can be found here:

www.ocr.org.uk/expression-of-interest

OCR Resources: *the small print*

OCR's resources are provided to support the delivery of OCR qualifications, but in no way constitute an endorsed teaching method that is required by OCR. Whilst every effort is made to ensure the accuracy of the content, OCR cannot be held responsible for any errors or omissions within these resources. We update our resources on a regular basis, so please check the OCR website to ensure you have the most up to date version.

This resource may be freely copied and distributed, as long as the OCR logo and this small print remain intact and OCR is acknowledged as the originator of this work.

OCR acknowledges the use of the following content:
Square down and Square up: alexwhite/Shutterstock.com

Please get in touch if you want to discuss the accessibility of resources we offer to support delivery of our qualifications:
resources.feedback@ocr.org.uk

Looking for a resource?

There is now a quick and easy search tool to help find **free** resources for your qualification:

www.ocr.org.uk/i-want-to-find-resources/

www.ocr.org.uk/alevelreform

OCR Customer Contact Centre

General qualifications

Telephone 01223 553998

Facsimile 01223 552627

Email general.qualifications@ocr.org.uk

OCR is part of Cambridge Assessment, a department of the University of Cambridge. *For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored.*

© **OCR 2017** Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England. Registered office 1 Hills Road, Cambridge CB1 2EU. Registered company number 3484466. OCR is an exempt charity.

