Qurious Education

2017 Edexcel AS Economics Paper 1 Microeconomics Paper

Model Answers

This document is helpful for longer essay questions/responses. Please reference the Mark Scheme for answers to Multiple Choice questions.

Pearson

Examiners' Report
June 2017

GCE Economics A 8EC0 01

ResultsPlus

edexcel

Question 1 (a)

Most candidates achieved 1 mark by defining opportunity cost. This question polarised performance with a significant number ignoring the 'marginal' content of the question, many calculated the opportunity cost cumulatively in the column provided. Top marks were awarded for completing the columns correctly using marginal analysis and referring to the table for contact to define opportunity cost to score the third mark.

Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.

1 The production possibility frontier for an economy is shown in the table below.

Capital goods output (million units)	Consumer goods output (million units)	Opportunity cost
0	42	–
10	40	2
20	36	4
30	30	6
40	22	8
50	12	10
60	0	12

(a) Explain, using marginal analysis from the table above, the concept of opportunity cost. (You may use the last column in answering the question.)

(3)

Opportunity cost is the next best alternative forgone value of the when making a production decision, for example when moving between 0 & 10 million capital goods, the opportunity cost is 2 million consumer goods, the marginal opportunity cost increases as capital output increases. as at 60m capital goods, the opportunity cost is 12m consumer goods

ResultsPlus
Examiner Comments

This answer achieved 3 out of 3 marks.

The candidate began by accurately completing the table as instructed, (1 Application mark). They then provided an accurate, concise definition of opportunity cost (1 Knowledge mark) before linking this as an example to the opportunity cost of the economy of moving from consumer goods to capital goods is initially small compared to gains in production. This was made using numerical references (1 Analysis mark) and the marginal opportunity cost increases again made numerically explicit.

ResultsPlus
Examiner Tip

Make sure you use the table provided and any calculations you have made to answer the question set.

Question 2 (a)

The most common correct definition was for a benchmark year or words to that effect. Sixty-four percent of candidates answered this correctly.

2 The table below shows UK wheat production between 2010 and 2015.

Year	Wheat production ('000 tonnes)	Index numbers of wheat production (2010 is base year)
2010	14 878	100
2011	15 257	102.7
2012	13 261	89.1
2013	11 921	80.1
2014	16 606	111.6
2015	16 129	108.4

(Source: adapted from https://www.gov.uk/government/uploads/system/uploadsattachment_data/file/466383/farming-statistics-2015-wheat-and-barley-production-uk.pdf)

(a) Define the term 'base year'.

(1)

Base year is the year used to compare performance in following years in this case the amount of wheat produced.

ResultsPlus
Examiner Comments

This answer achieved 1 out of 1 mark. A definition of 'base year' was accurately provided (1).

ResultsPlus
Examiner Tip

The mark scheme accommodates a range of accurate economic definitions for 'base year'. Concise accurate answers for 1 mark are the best approach.

Question 2 (b)

Seventy percent of candidates achieved full marks on this question. Many candidates entered the data into the column. For those only using the answer space there was evidence of lots of working so it was important for them to clearly identify their final answer.

year because its at 100.

(b) Calculate the index numbers for 2011 and 2012, using 2010 as the base year.

(2)

2011 - $\frac{15257 - 14878}{14878} \times 100 = 2.54\ (2.5 + 100) = 102.5$

2012 $\frac{15261 - 14878}{14878} \times 100 = -10.9 \cdot\cdot 10.9 + 100 = 89.1$

ResultsPlus
Examiner Comments

This answer achieved 2 out of 2 marks.

ResultsPlus
Examiner Tip

It is advisable to show your working for your own benefit to avoid computational errors.

(b) Calculate the index numbers for 2011 and 2012, using 2010 as the base year.

(2)

2011 = 102.55

2012 = 89.13

ResultsPlus
Examiner Comments

This answer achieved 2 out of 2 marks and could have alternatively inserted the accurate figures in the boxes provided.

ResultsPlus
Examiner Tip

You can simply provide the correct answers and move on if you are certain.

Question 3 (a)

This was a high scoring answer. The most common answers referred to government grant or encouraging consumption or production usually in context.

3 In 2015 the UK government cut subsidies for the installation of solar energy panels.

(a) Define the term 'subsidies'.

(1)

An amount of money / grant given by the government to producers to lower cost of production & increase supply

ResultsPlus
Examiner Comments

This answer achieved 1 out of 1 mark. Definition of 'subsidy' was accurately provided (1).

ResultsPlus
Examiner Tip

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

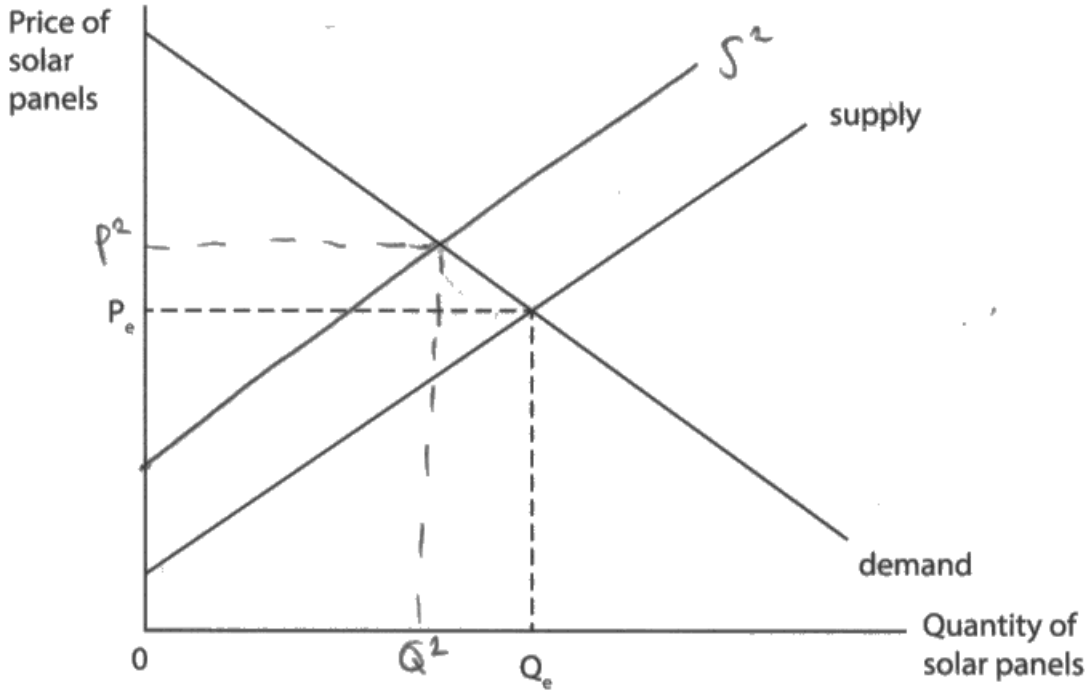
Question 3 (c)

Just over eighty percent of candidates had little trouble in obtaining full marks by making effective annotations of the diagram. A significant number of candidates lacked precision, losing a mark for not labelling the new curve or equilibrium points.

(c) Annotate the diagram below to show the effect of removing the solar panel installation subsidy on the equilibrium price and quantity.

(2)

Solar panel installation market diagram



ResultsPlus
Examiner Comments

This candidate achieved 2 out of 2 marks.

Clear and confident annotations was provided identifying the new supply curve drawn and labelled, showing a shift inwards, and the new equilibria labelled showing a rise in price and decrease in quantity.

ResultsPlus
Examiner Tip

Ensure you fully label accurate diagrams to obtain full marks.

Question 4 (a)

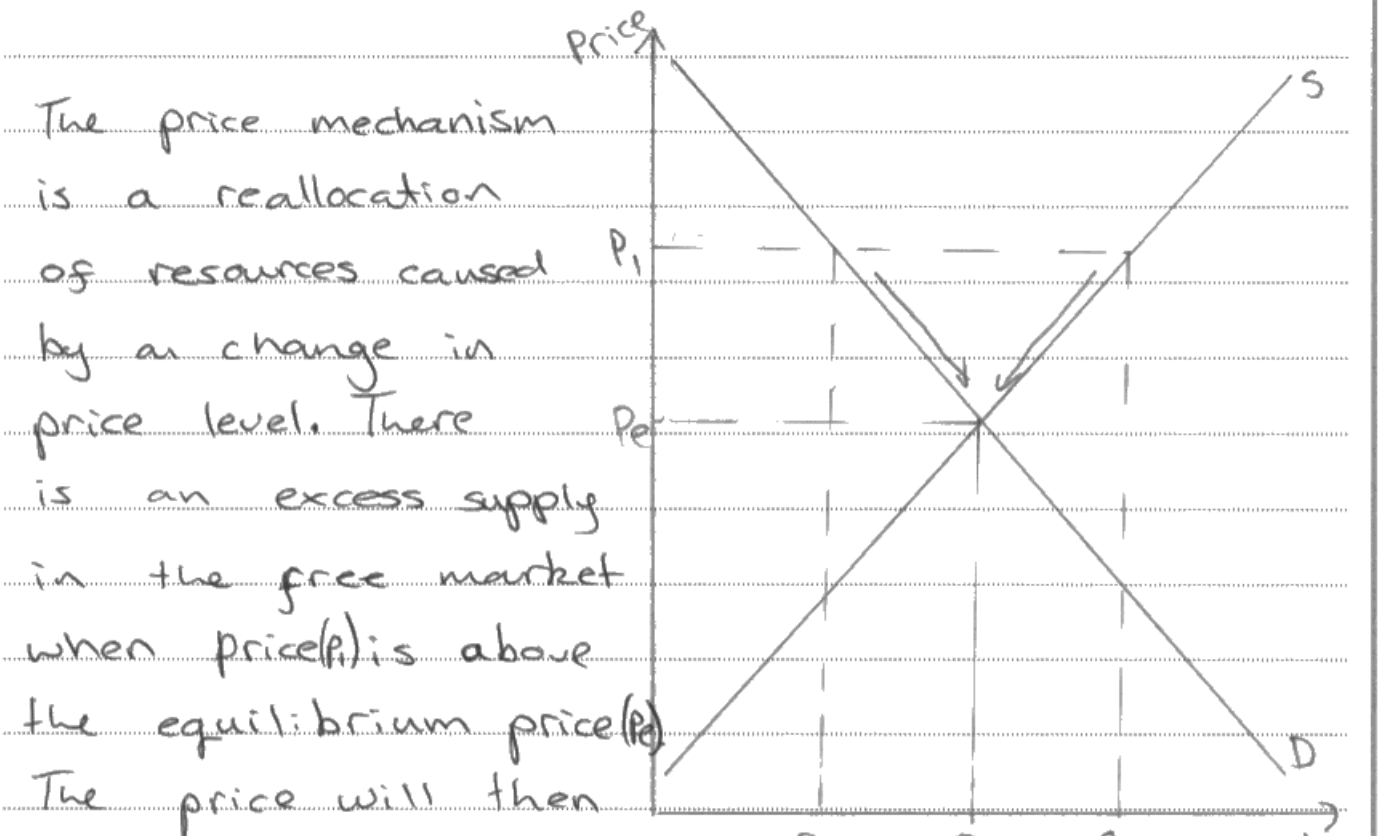
The more able responses for this question immediately identified surplus on a diagram or a written definition, there was some confusion with excess demand for some candidates. The price mechanism in a free market was usually addressed confidently with reference to signalling or the price falling below $530 on their diagram or in written form for application. The most common limitation to candidate answers was despite many good diagrams the absence of analysis in explaining the diagram in context, with few discussing extension in demand/contraction in supply or annotating their diagrams fully as shown in the mark scheme. A number of candidates wrote in great detail about the price mechanism but failed to apply it to the context.

4 The excess supply of carbon steel has recently caused its global price to fall below $530 per tonne.

(Source: adapted from http://www.meps.co.uk/allproducts%20steel%20price.htm)

(a) Explain how the price mechanism responds to excess supply in a free market.

(3)



The price mechanism is a reallocation of resources caused by an change in price level. There is an excess supply in the free market when price(P_1) is above the equilibrium price(P_e) The price will then be lowered which signals to producers to leave the market(excess supply/ or produce less because it surplus is less profitable, which causes a contraction in supply. It also gives incentive to consumers to buy more as it is cheaper, which

causes an expansion in the demand curve.

ResultsPlus
Examiner Comments

This answer achieved 3 out of 3 marks.

A clear, concise and well-structured answer, based around a fully labelled accurate diagram, was provided. The candidate immediately identified the price mechanism in a free market rations (reallocates) resources (1 mark for application) then using their diagram defined at P1 excess supply (1 mark for knowledge). The use of signalling (1 Application) to contract supply (1 Analysis) and incentive (1 Application) to extend demand as illustrated (1 analysis) ensured full marks. Note a maximum of 1 mark for application and 1 mark for analysis was available. It would have been good to have seen reference to steel in the answer but there was plenty of application as awarded in the mark scheme for price mechanism.

ResultsPlus
Examiner Tip

A carefully drawn diagram can be a useful aid to structure your response around.

Question 5 (a)

The more able responses for this question accurately defined excess demand and clearly identified it in a fully labelled diagram which was then briefly explained in context. There was some confusion with excess supply for some candidates. As with 4(a) the most common limitation to candidate answers was despite many good diagrams the absence of analysis in explaining the diagram in context , with few providing linked development indicating the maximum price was below the equilibrium price or reference to extension in supply/contraction in demand or annotating their diagrams fully as shown in the mark scheme. The most common application mark was reference to candidates being more able to afford higher education, marks were often lost by failing to explain the decrease in fees made them more affordable.

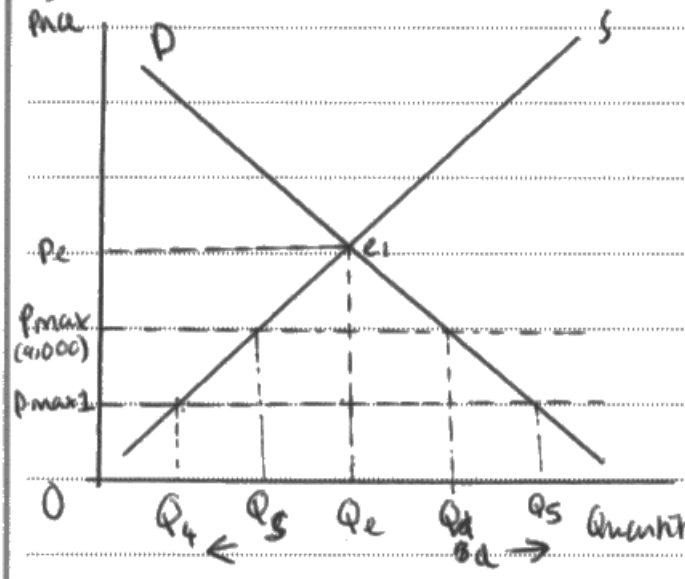
5 Universities UK raised concerns about the proposal to reduce the maximum tuition fees (fee cap) for undergraduate courses in England from £9 000 to £6 000. It stated "This unfunded proposal to reduce the fee cap would damage the quality of experience our universities could deliver to students and remove opportunities for those seeking to benefit from a university education".

(Source: adapted from tuition fees 2015 Times letter Universities UK http://www.universitiesuk.ac.uk/highereducation/Pages/UUKboardFeesLetter.aspx#.VjoQRbfhDIU)

(a) Explain why reducing the tuition fee cap may result in excess demand for university places.

(3)

Maximum Tuition fees (fee cap) is an example of a maximum price control where governments set a maximum price for a good below the free market equilibrium point. The lower price means that more consumers are willing and able to afford university tuition.



If the maximum price control was lowered to '£9,000' to '£6,000' more people would be able to afford the fees. This is shown on the graph, as Price falls from Pmax to Pmax 1, excess demand increases from point Qd to Qs.

ResultsPlus
Examiner Comments

This answer achieved 3 out of 3 marks.

The initial sentence unpacked the data to provide the economic concept of a maximum price carefully explained and then later illustrated (1 Analysis). The diagram drawn was accurate and carefully applied the initial maximum price of £9,000 (1 Application) further to this the candidate added that 'more people would be able to afford the fees' (1 Application). Finally the definition of excess demand was provided with reference to the diagram, although a little benefit of doubt was given here aided by the arrows provided (1 Knowledge). Without the definition being provided this response would have obtained 2 out of 3 marks.

ResultsPlus
Examiner Tip

When using a diagram make use of clear and precise labels.

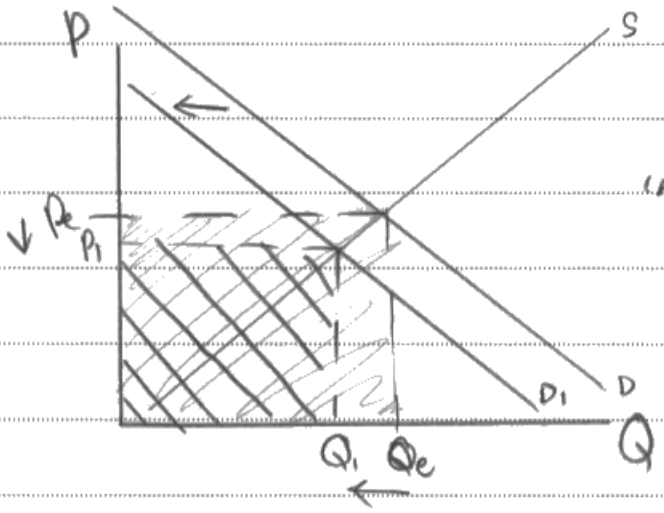
Question 6 (a)

The question required candidates to explain why 'bans on tobacco advertising' may result in a fall in revenue. Most candidates started with a diagram and explained how the ban would shift demand to the left. More able candidates then clearly defined revenue in their written explanation or by identifying in their diagram and went on to explain or clearly illustrate the fall in revenue.

Almost all candidates drew a well-labelled and accurate diagram showing the shift but marks were lost by failing to define revenue or show the effect on revenue in the diagram, in some cases there was confusion with profit.

6 (a) Explain why 'bans on tobacco advertising' (Extract A, line 7) may result in a decrease in the revenue of tobacco firms. Include a supply and demand diagram in your answer.

(5)



bans on tobacco advertising are likely to result in an inward shift of demand from D → D1, this is because consumers are no longer being convinced to buy them & are not affected by advertising anymore.

If Demand falls then revenue falls.

Revenue is equal to Quantity x price

The original revenue of producers is Pe x Qe . However this falls to P1 x Q1

ResultsPlus
Examiner Comments

5 out of 5 marks awarded.
The answer began with applying the ban to a shift inwards in demand as illustrated (awarded 1 mark for Application). There then followed further relevant application regarding consumers but this had already been awarded. The candidate then defined revenue (1 Knowledge). Finally the candidate explained the decrease in revenue with a careful reference to a relevantly shaded diagram (+1 Application as well as identifying revenue worth 1 Knowledge). The diagram clearly showed the shift left in demand and the new equilibrium, aided by relevant arrows (1+1 Analysis).

ResultsPlus
Examiner Tip

Always make explicit use of your diagram when asked to draw one to answer the question set; in this case illustrating the decrease in revenue of tobacco firms.

Question 6 (b)

The question required candidates to assess the view that tobacco consumers switching to e-cigarettes is an example of rational behaviour. It proved to differentiate effectively between the quality of responses particularly at the top and lower end of the mark range. Typical responses carefully used the data to identify rational behaviour drawing on Figure 1 price comparisons, tobacco tax increases in Extract A or health concerns in Extract B. Level 2 responses tended to limit themselves to using the data and their own knowledge and only a confident understanding of the concept of rational behaviour in context could access Level 3. As a consequence many answers to this question followed a similar pattern with financial gains and health concerns being most common, more able candidates used the data to support their answers and discussed concepts such as utility. Some candidates were able to correctly define rationality although many thought it was predictable or sensible behaviour. This was a high scoring question with the majority of candidates using the data to evaluate fully. There was little evidence of candidates flipping KAA and EV, which was awarded as the mark scheme allowed. Responses which provided thin evaluation by just mentioning magnitude of price differences or tax rises only achieved a Level 1 evaluative award. Level 2 evaluation often referenced the data with information gaps as to the benefits or brand loyalty of cigarettes often coming up.

(b) With reference to the information provided and your own knowledge, assess the view that tobacco consumers switching to e-cigarettes is an example of rational behaviour. – herding behaviour / unhealthy.

(10)

Rational behaviour is the idea that consumers aim to maximise their own welfare. Tobacco consumers switching to e-cigarettes may be an example of rational behaviour due to it being a physically "healthier option" especially with estimates that "8 million each year will die as a result of smoking cigarettes by 2030", therefore by a consumer switching to e-cigarettes they may be improving their life expetancy thus increasing their welfare and quality of life in the long term.

However, consumers switching to e-cigarettes may be an example of irrational behaviour especially if the choice is made based off the idea that others are switching their consumption to e-cigarettes, this herding behaviour may be irrational as consumer people may not be maximising their welfare, because especially if they prefer cigarettes to e-cigarettes, despite it being unhealthier.

Also, consumers switching to e-cigarettes may be an example of difficulty in computation and thus is irrational behaviour. If consumers are only presented the negatives of cigarettes by the government, they may not be able to make an informed decision and thus won't be maximising their welfare if the benefits of cigarettes outweigh the benefits of switching their consumption to e-cigarettes.

ResultsPlus
Examiner Comments

10 out of 10 marks awarded.

The candidate achieves all 6 Knowledge, Application and Analysis marks available by securely achieving top Level 3 (L3KAA) in their first paragraph. They immediately answer the question by defining rational behaviour and linking their understanding in a fully integrated context. The candidate then demonstrates their evaluative skills in the second paragraph which carefully applies herding behaviour as irrational behaviour in context, achieving Level 2 evaluation (L2 EV). The final paragraph includes another evaluative comment raising the issue of computational problems with measuring welfare benefits in depth and in context. Given the quantity and quality of evaluation there is a case for flipping KAA and EV, to guarantee full marks, as indicated on the mark scheme.

ResultsPlus
Examiner Tip

Make sure you develop key knowledge with concise explanations and precise use of data. Similarly, well-balanced evaluation will also be well explained and in context as in this example; albeit perhaps not so extensive given time constraints.

Question 6 (c)

The question asked candidates to explain how changes in the price of tobacco cigarettes may affect the demand for e-cigarettes over time, given tobacco cigarettes and e-cigarettes are considered to be substitutes.

High scoring candidates confidently identified a close substitute relationship with a positive cross price elasticity of demand greater than one and explained in context.

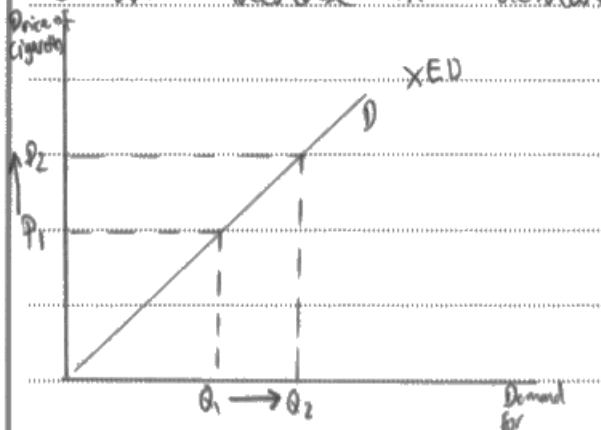
Knowledge marks proved relatively easy for candidates to score with many identifying the positive relationship and/or giving the formula/definition of XED. Application marks proved harder to score, substitutes both containing nicotine being one of the more common marks. Some diagram were drawn either showing XED relationship, but fewer showing the relationship between the two markets. There was the odd attempt to evaluate which was not required for this type of question.

Tobacco cigarettes and e-cigarettes are considered to be substitutes.

(c) Explain how changes in the price of tobacco cigarettes may affect the demand for e-cigarettes over time.

(6)

Substitutes are where an increase in the price of good A leads to an increase in demand for good B. This means that for the increase in price (P_1 to P_2) of tobacco cigarettes, there will be an increase in demand (Q_1 to Q_2) for e-cigarettes as shown by the diagram on the left. This is because the increase in price of tobacco cigarettes may give consumers an incentive to switch to e-cigarettes, especially if the magnitude of the price increase results in the price of cigarettes being above what consumers are able and willing to pay for e-cigarettes.



ResultsPlus
Examiner Comments

6 out of 6 marks awarded.

The candidate started by defining substitutes through the cross elasticity of demand formula (1 Knowledge) before a linked development of analysing in context (1 Analysis). This was further aided with application to a diagram showing the impact of a price rise in tobacco cigarettes on e-cigarettes (1+1 Application). Finally the candidate gained a further knowledge mark by understanding the substitute relationship 'switching (1 Knowledge) and analysed this with reference to the magnitude of the price increase (1 Analysis).

ResultsPlus
Examiner Tip

A good way of achieving maximum marks for an explain question is to carefully go through the concept, in this case the cross elasticity of demand, illustrating your knowledge of the concept as you apply it to the context.

Question 6 (d)

The question was one requiring use of quantitative skills and provided an accessible question asking candidates to calculate the price elasticity of demand for tobacco cigarettes in high-income countries and in low-middle-income countries. Eighty five percent of candidates achieved full marks by correctly applying the PED formula twice to the data provided in Extract A, lines 11–13. Where marks were lost was an inability to identify the correct formula to perform the calculation. Where the correct formula data was substituted into the formula but the wrong answer was provided this was awarded 1 of the marks available. Answers which simply wrote down an acceptable accurate response, 0.4 and 0.5, were awarded full marks.

(d) With reference to Extract A, lines 11–13, calculate the price elasticity of demand for tobacco cigarettes in high-income countries and in low-middle-income countries. You are advised to show your working.

(4)

4% ↓ High-income countries 10% tax ↑ $PED = \frac{\%\Delta \text{ in } Q_D}{\%\Delta \text{ in } P}$

$\frac{-4}{10} = -0.4$ - So in high income countries tobacco is fairly price inelastic, meaning that consumers will continue to buy tobacco even if the price changes as they are addicted to it.

5% ↓ Low-middle-income countries

$\frac{-5}{10} = -0.5$ - So in low-middle income countries tobacco is slightly more price-inelastic than in higher income countries. consumers are still addicted and will continue to buy tobacco products.

ResultsPlus
Examiner Comments

4 out of 4 marks awarded.

Correct formula identified which if it was done in isolation with no further correct responses would obtain 1 mark. 1 mark was awarded for data located for high income countries and substituted into correct formula used (1 mark). Correct answer '-0.4' was provided (2 marks). 1 mark for data located was awarded for low income countries and substituted into correct formula used (1 mark). Correct answer '-0.5' was provided (2 marks). The written comments explaining what the answers meant were not relevant to the question so were awarded no marks.

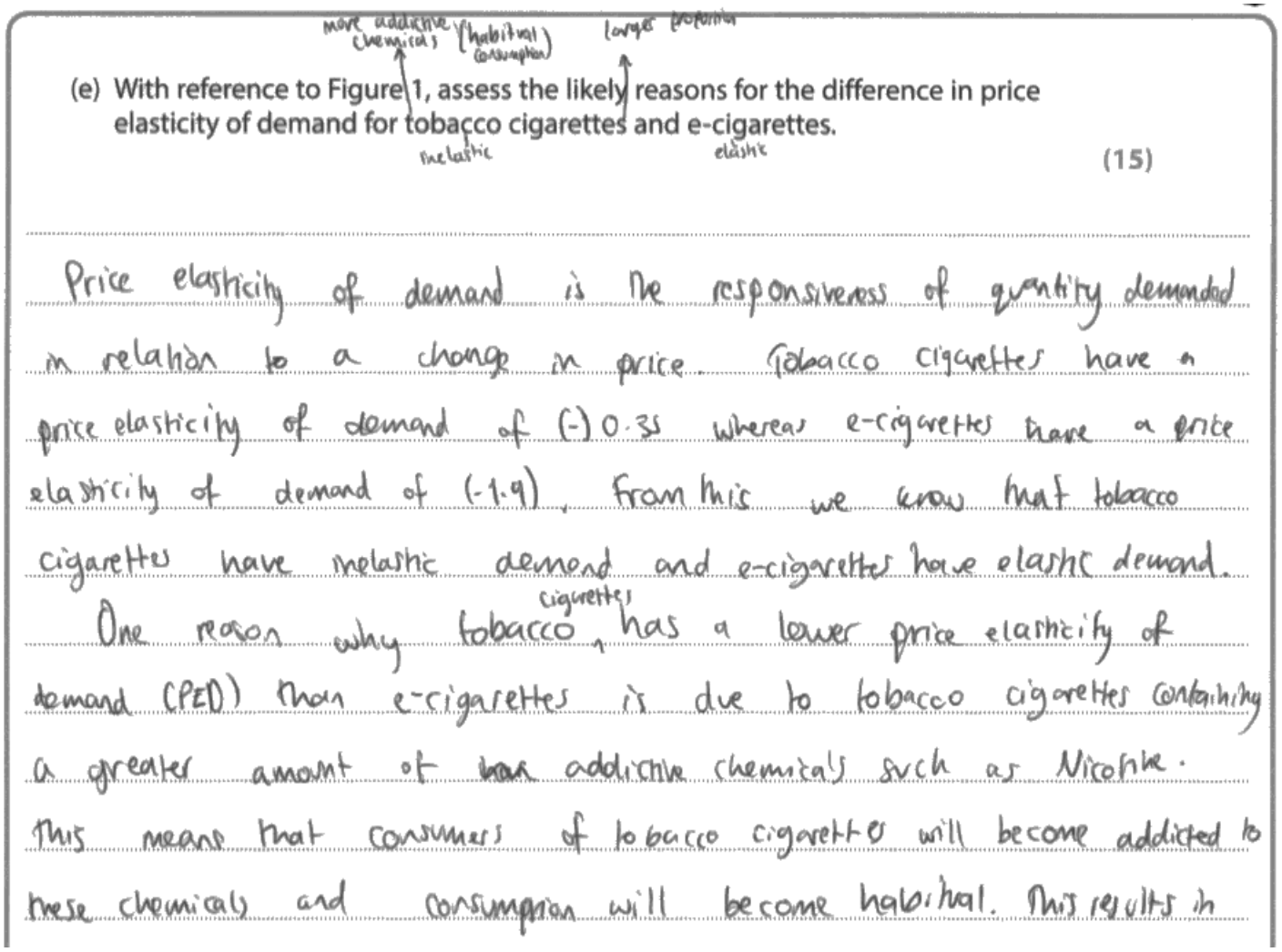
ResultsPlus
Examiner Tip

Accurate working will always receive credit and candidates are strongly advised to show their working in case they make a computational error with the final answer.

Question 6 (e)

The question invited candidates to assess the likely reasons for the difference in price elasticity of demand for tobacco cigarettes and e-cigarettes, with reference to Figure 1. More able candidates clearly understood the determinants of price elasticity of demand in context and provided a coherent chain of reasoning to access top level KAA. They did not have to cover all the reasons but often covered two in depth, typically the closeness of the substitute given and the proportion of income spent. There were many strong answers on this question, with candidates being able to distinguish and give reasons for the difference in PED. In some cases there was repetition of one reason applied to tobacco and then e-cigarettes. Less able candidates did not know the determinants of PED and often started with defining price elasticity of demand but then became confused by covering determinants which cause shifts in demand rather than determinants of the relative price elasticity of demand determinants.

In the evaluation for high scoring candidates some behavioural approaches were often used in conjunction but evaluation typically focused on why the determinant may change over time, e.g. closer substitutes or changes in price often using Figure 1. Top level evaluation made use of the context and provided a clear chain of reasoning, typically completed within two separate evaluative points. Full marks were not always accessed when the answer did not consider the broad elements of the question.



more addictive chemicals (habitual consumption) larger proportion

(e) With reference to Figure 1, assess the likely reasons for the difference in price elasticity of demand for tobacco cigarettes and e-cigarettes.

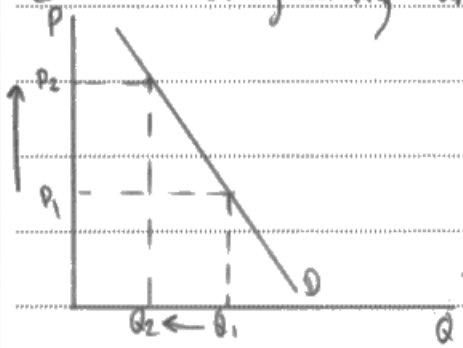
inelastic elastic

(15)

Price elasticity of demand is the responsiveness of quantity demanded in relation to a change in price. Tobacco cigarettes have a price elasticity of demand of (-) 0.35 whereas e-cigarettes have a price elasticity of demand of (-1.9). From this we know that tobacco cigarettes have inelastic demand and e-cigarettes have elastic demand.

One reason why tobacco cigarettes has a lower price elasticity of demand (PED) than e-cigarettes is due to tobacco cigarettes containing a greater amount of addictive chemicals such as Nicotine. This means that consumers of tobacco cigarettes will become addicted to these chemicals and consumption will become habitual. This results in

consumers being willing and able to pay higher quantities so despite large price changes, consumers will reduce quantity demanded less proportionately e.g. a 10% increase in price may only lead to a 3.5% decrease in quantity demanded.



However, e-cigarettes also contain these harmful addictive chemicals so one may question whether the elasticity of (-)1.9 has been correctly calculated and believe that the elasticity of e-cigarettes should also be much lower and inelastic. E-cigarettes are a relatively new product so the long term effects of the chemicals how and how addictive they really are how not become evident yet.

A second reason why the price elasticity of demand for e-cigarettes is much more elastic (higher value of PED) than cigarettes may be due to the pricing of both. Figure 1 shows that a packet of 20 tobacco cigarettes is £7.70 - £9.50 and the price of e-cigarettes is £9.99 to £19.99. Therefore e-cigarettes cost a larger proportion of a consumers income and this makes it more inelastic as any price changes will cause a greater consumer response via changes in quantity demanded. For example a 5% 10% increase in price of e-cigarettes will result in a greater change in quantity demanded, of which would be 19% fall in quantity demanded at a PED value of (-) 1.9.

However the price of a single cigarette equivalent is far smaller for an e-cigarette at 7p than a tobacco cigarette at 48p. This means that PED should be more elastic

for tobacco cigarettes if consumers are acting rationally and therefore this (-) 1.9 elasticity value for e-cigarettes should be less and the (-) 0.35 elasticity value for tobacco cigarettes should be greater. The only explanation for these values is consumer difficulty in computation and therefore they do not have a full understanding in order to make a judgement on whether to change their consumption in relation to a change in price.

ResultsPlus
Examiner Comments

15 out of 15 marks awarded.

A confident start was made by concisely defining price elasticity of demand and using the data to identify relative elasticity. This was then followed by a well-structured paragraph on addictiveness of nicotine in tobacco cigarettes linked to it becoming habitual compared to e-cigarettes (Level 3+ KAA). The chain of reasoning was then well balanced with Level 3 evaluation explaining the lack of information linked to how as a new product e-cigarettes may become more addictive over-time (Level 2 EV). The use of data to compare the proportion of income taken up by the two products was then well analysed in context (L3+KAA). The final paragraph then critiqued this by questioning the PED measures and computational problems for consumers in comparing the two products (Level 2 EV). Overall it achieved top Level 3 KAA marks and Level 2 evaluation as an assess question and also achieved top Level 3 evaluation as a discuss question.

ResultsPlus
Examiner Tip

A well-structured 15 mark response will enable you to more fluidly link knowledge and understanding in context using relevant and focused examples which are fully integrated into one paragraph. This will then enable you to provide linked evaluation to a similar standard. Ensuring the evaluation is balanced and covers the broad elements of the question in depth.

Question 6 (f)

The question required candidates to evaluate the possible advantages of a free market approach to cigarette consumption. The question was significantly less popular than 6(g) and had more polarised responses. Candidates were expected to draw on their own understanding of a free market approach and were aided by the data in Extract B. Top Level 3 or 4 responses provided well-structured balanced responses with often some evidence of planning. They made effective use of the data in Extract B in particular and applied free market theory to non-governmental solutions using market forces, typically covering signals, rationing and incentives. Diagrammatic analysis was not required but when used was accurate and well explained with a solid chain of reasoning. More able answers referred to the substitution effect happening between tobacco and e-cigarettes and made references to utility. Hardly any candidates made a direct reference to Adam Smith or Hayek but their ideas were often implicit in the candidates writing and this was to be expected and awarded a high level. Level 4 answers often drew, in a sophisticated manner, from the broad Theme 1 specification to provide logical chains of reasoning. A key differentiator was the quality of knowledge and understanding of free market approaches, often carefully applied through logical and clear chains of reasoning. Level 2 answers tended to use basic and generic supply and demand analysis or changed the focus of the question to government intervention.

Evaluation tended to concentrate on information gaps or the role of government to prevent consumers being exploited and protecting third parties against passive smoking but could often be generic or common-sensical resulting in Level 1 evaluation. Level 2+ evaluation was placed in context and developed with a good chain of reasoning. Best uses of substantiated judgement were sustained throughout in candidates' responses as they made effective use of positive economics to make judgement calls answering the question by weighing up the free market approach to come to a clear answer to the question set.

EITHER

(f) Evaluate the possible advantages of a free market approach to cigarette consumption.

(20)

OR

(g) Evaluate the impact of government intervention in the cigarette market.

(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:

A free market is where resources are publicly owned and allocated to those ~~need~~ are willing to pay the most with not govt intervention. Where

producers decided how much they produce, for whom and at what price.

An advantage of having a free market approach to cigarette consumption is that firms will have an incentive to keep their customer alive because they still want customers to buy their product so they can take in revenue. Also consumer will obviously have an incentive to stay alive so they will try and look for a healthier option or try and quit so without gov't intervention firms and consumer will be able to limit the amount of cigarettes consumed and produced by possibly setting the prices higher or buying a substitute good. Therefore consumption will decrease.

However firms will still want sales and consumers will still be addicted. Therefore firms will still sell and consumer will still buy and therefore the government intervening may seem like the only way. It would involve 'banning advertising, raising price and restricting availability'. Banning advertising would help reduce the amount of new customer as less people would be attracted to it through adverts. This would reduce consumption. Raising price would reduce demand a bit but it is addictive so people may still buy it but in conjunction with

other methods it would help. Restricting availability would definetly help because if people couldn't get tobacco they would be forced to quit or to buy a substitute.

Another advantage of having a free market approach is the consumer may be more likely to switch to e-cigarettes. This is because with government intervention (command economy) people using e-cigarettes 'face increased regulations and in many countries they are banned'. So when people are trying to seek the healthier option it is harder for them. They may not see switching as worth their time because they will either be banned or have regulations enforced onto them and quitting would be harder than not. Therefore a free economy may be seen as better for the ~~free market~~ e-cigarette market as there will be no government imposed regulations.

However these regulations and bans may have been set for a reason that being that the long-term effects of e-cigarettes are still uncertain so they may still be bad for health. The government may think that increased taxes and banning e-cigarettes may encourage people to quit all together which would be better than switching.

Overall I think that a free market would not be best when trying to reduce cigarette consumption because even though customers may want to be healthier and firms want their customers to stay alive the only reason they sell tobacco is to make money and if they're not making money then theres no point so they will want to encourage people to buy them. They put 'smoking kills' on the package so that when people die of it other customers can't blame the company for 'faulty' products and think the company itself is bad.

ResultsPlus
Examiner Comments

20 out of 20 marks awarded.

The candidate started by defining free market and after making a confused comment about 'publicly owned' provided an accurate definition which was also implicit throughout the essay. The first advantage they focused on was the incentive effect for firms and consumers. The paragraph was well-structured, demonstrating a logical and coherent chain of reasoning in context to a Level 4 standard. The evaluation provided a case for government intervention against the free market which was valid and in context. The second advantage of having a free market was it makes it easier for consumers to switch; there was precise use of theory and focus on context fully integrated to earn top Level 4 (14 KAA). Evaluation was then linked to the need to regulate to prevent consumers switching to unhealthy products and the need to quit to a Level 3 evaluation. The conclusion locks in Level 3 evaluation as it offers a substantiated judgement.

ResultsPlus
Examiner Tip

By carefully structuring your response it is easier to then offer a sophisticated approach to developing a coherent argument in depth and in context.

Question 6 (g)

The question invited candidates to evaluate the impact of government intervention in the cigarette market. This was by far the most popular essay choice and the majority of candidates were able to explain policies and evaluate to a good level. There was much evidence in the data which gave candidates an opportunity to analyse and evaluate possible types of government intervention. Most frequently offered answers were taxation (although often not specified what tax), subsidies (whether of information or for e-cigarettes) and minimum pricing. The most able candidates explained the impact of taxing cigarettes and in most cases moved on to discuss the effects of a minimum price making effective use of mostly Extract A enabling them to access Level 3 and above. Some candidates considered bans in public spaces or subsiding e-cigarettes or nicotine patches. High Level awarding was available for those able to structure their answer and make effective use of the information and accurate well-labelled diagrams where appropriate. Tax and minimum price were usually applied diagrammatically and explained linking to effects on consumption, producer and consumer tax burden, surpluses and effects to consumers. A number of candidates confused minimum and maximum prices and also confused buffer stocks. There was clear differentiation in approach from basic diagrams showing a shift inwards in supply or a minimum price without the surplus identified to fully labelled and annotated diagrams. More candidates would benefit from fully explaining their diagrams. Often candidates illustrated an exkternal cost diagram but did not always succeed in linking it to the question set.

Evaluation was often critical of government intervention as ineffective given the price elasticity of demand in the short run or considered it as more effective in the long run if they had already used price inelasticity as part of their analysis typically on taxation. The other main methods of evaluation was considering the unintended consequences of encouraging the hidden economy and missing information on external costs to accurately impose a socially optimum tax. Top level evaluation made effective use of data discussing causes of government failure. Often evaluation was very narrowly focused on unintended consequences focusing on smuggling and thereby not enabling candidates to access Level 3e. Effective sustained judgement balanced government failure against the need for further research and reforms in government intervention and attempted to use positive economics to make the judgement call.

EITHER

(f) Evaluate the possible advantages of a free market approach to cigarette consumption.

P: ↓negative ex ↑tax rev EV: Government failure/ unintended cons – BM (20)

OR

(g) Evaluate the impact of government intervention in the cigarette market. PED (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 ☒.

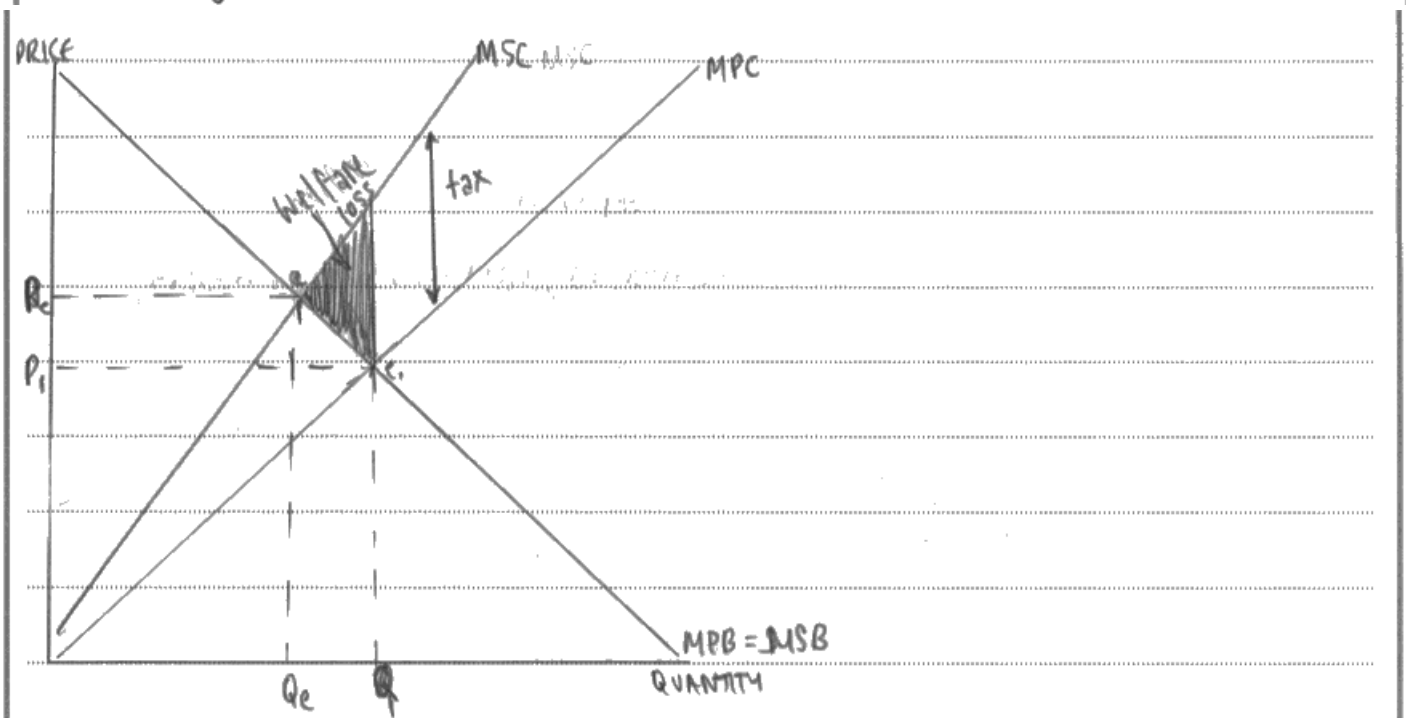
Chosen question number: **Question 6(f)** ☐ **Question 6(g)** ☒

Write your answer here:

Government intervention is when the government changes the law/ intervenes in the free market to correct market failure. In the cigarette market the main form of government intervention is an ad valorem tax, which is a tax that is a percentage of the price for every unit.

$ overconsumption of cigarettes

Taxes of are good as they can internalise the negative externalities caused by smoking cigarettes such as 'cancer' $ '8 mil people dying'. This is because if the tax set is equal to the external costs, then the quantity demanded & supplied can be decreased to a socially efficient equilibrium. By increasing the tax on cigarettes to '10%', this decreased demand for the good as the prices increase. This therefore means that there are less people dying or getting cancer which reduces the strain on the NHS, so the government can be spent elsewhere such as on education. This also increases people's living standards so they can live healthier lives with reduced costs.



However, this would depend on the price elasticity of demand. In the extract it states that a '10% tax' decreases tobacco consumption by 4%' & '5%'. This shows that the PED must be inelastic (as it is '-0.35') as the increase in tax decreases consumption by a less than proportional amount. Therefore if demand is inelastic, the tax will not have a great impact on consumption, so quantity demanded will not decrease by much & the negative externalities on health etc. will remain.

Secondly, there will be tax revenue raised from the 10% tax on tobacco. This money could be hypothecated & used to subsidise e-cigarettes or used to advertise the negative externalities of smoking more so there is less incomplete information about smoking. This could help reduce demand for cigaretten which could decrease the welfare loss as it would bring the MPC closer to the MSC via the tax & the use of the tax revenue.

However, there could be government failure such as unintended consequences like black markets. The increase in price of cigarettes could cause consumers to go to black markets to buy them cheaper. This could decrease tax revenue for the government & could also cause more harmful chemicals to be used in the black market cigarettes as there would be no regulation. This could cause worse health issues & cause increased costs for the NHS.

In conclusion, a tax may not be the most sufficient means of government intervention as it could cause black markets & may not work due to inelastic PED. However, this depends on, if the tax can raise enough revenue & reduce overconsumption of the cigarettes.

ResultsPlus
Examiner Comments

20 out of 20 marks awarded.

The candidate started by defining government intervention and decided to focus on the main form of intervention in the cigarette market, ad valorem tax. This was a valid approach as the question did not ask for different methods. The first impact they focused on was internalising the negative externality. The paragraph was well-structured, demonstrating a logical and coherent chain of reasoning in context to a Level 4 standard. The diagram was to a Level 2 standard as it would have been good to see the tax incidence correctly labelled, consideration of the burden and integrated into the answer. The evaluation though does link back to the effectiveness of the tax in internalising the externality in context to a Level 3 evaluation standard. The second impact considered was the use of the tax revenue being hypothecated to subsidise e-cigarettes and an educational campaign; there was precise use of theory and focus in context fully integrated to earn top Level 4 (14 KAA). Evaluation was then linked to the questioning of how much tax revenue would be raised due to the hidden economy and that the negative externalities could be larger due to unintended consequences of government failure (Level 3 EV). The conclusion locked in Level 3 evaluation as it offered a substantiated judgement focused on the effectiveness of the tax depends on how much tax revenue was raised.

ResultsPlus
Examiner Tip

By linking together precisely and coherently different concepts in context you are more likely to access top level marks in KAA and EV; this candidate exemplifies this.