

# Mark Scheme (Results)

Summer 2014

Pearson Edexcel GCE  
in Economics (6EC01) Paper 01

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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

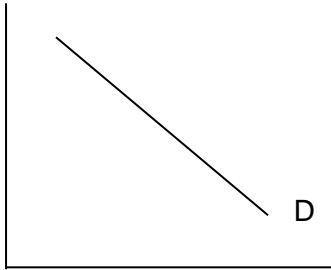
**NB: candidates may achieve up to 3 explanation marks even if incorrect option is selected.**

**NB: candidates may achieve up to 3 marks for explaining three incorrect options (provided three different reasons are offered and each option key is explicitly rejected).**

Question Number	Answer	Mark
Q1	<p><b>Correct option B (1 mark)</b></p> <ul style="list-style-type: none"> <li>• Definition of opportunity cost (the value of the next best alternative foregone) <b>(1 mark)</b></li> <li>• Definition of scarcity (resources are limited or finite in supply and so cannot meet all human wants) <b>NB: need reference to wants or needs here to award (1 mark)</b></li> <li>• Definition of resources (for example, labour, land, capital and enterprise used in production of goods and services) <b>(1 mark)</b></li> </ul> <p><b>NB: award for a maximum of 2 definition marks.</b></p> <ul style="list-style-type: none"> <li>• Example of scarce resources (for example, fossil fuels are finite in supply) <b>(1 mark)</b></li> <li>• Application of opportunity cost (for example, a producer or consumer may have to choose between two different products / government may have to choose between a new hospital or a new school) (this may be shown by diagrammatic analysis: movement along the production possibility frontier / revealing the gain in one good and loss of the other good) <b>(1+1 marks)</b></li> </ul> <p><b>Rejection marks</b></p> <ul style="list-style-type: none"> <li>• Option A incorrect since this is a definition of market failure – not an explanation of why resources are scarce. <b>(1 mark)</b></li> <li>• Option C incorrect since resources are finite compared to human wants / or finite resources result in the basic economic problem. <b>(1 mark) NB: do not double award with regards to the definition of scarcity.</b></li> <li>• Option D incorrect since supply exceeding demand is due to price being too high / the resources used in supply are scarce. <b>(1 mark)</b></li> </ul>	<b>(4)</b>

Question Number	Answer	Mark
Q2	<p><b>Correct option A (1 mark)</b></p> <ul style="list-style-type: none"> <li>• Definition of division of labour (for example, production of a good is broken down into different tasks and labour allocated to each task). <b>(1 mark)</b></li> <li>• Application to building a house ( for example, painter and decorators, bricklayers, plumbers, electricians, roof tilers)<b>(1 mark)</b></li> <li>• Reason(s) for an increase in output per unit of labour/productivity: workers becoming more skilled in particular tasks through repetition / more efficient use of equipment / less time wasted moving from one job to another different job / less time taken for workers to get trained on a particular job or lower training costs). <b>(1+1 marks)</b></li> <li>• Award a demand and supply diagram depicting an increase in supply and lower price / or a written explanation to this effect. <b>(1 mark)</b></li> </ul> <p><b>Rejection marks</b></p> <ul style="list-style-type: none"> <li>• Option B incorrect since prices are more likely to fall since cost of building each house has fallen. <b>(1 mark)</b></li> <li>• Option C incorrect since the cost of producing each house should fall as labour productivity increases. <b>NB: do not double award if diagram mark already given. (1 mark)</b></li> <li>• Option D incorrect since each worker will concentrate on a narrow range of skills such as a bricklayer, rather than other skills involved with tiling and plumbing <b>(1 mark)</b></li> </ul>	<b>(4)</b>

Question Number	Answer	Mark
Q3	<p><b>Correct option C (1 mark)</b></p> <ul style="list-style-type: none"> <li>• Explicit reference to the price data, for example, price fell from 368 cents to 321 cents per kilo. <b>(1 mark)</b></li> <li>• Diagram depicting an increase in supply / decrease in price <b>(1+1 marks)</b> OR written explanation to this effect <b>(1 mark)</b>.</li> </ul> <div data-bbox="464 510 999 965" data-label="Figure"> <p>The diagram is a standard supply and demand graph. The vertical axis is labeled 'Price' and the horizontal axis is labeled 'Quantity'. A downward-sloping line is labeled 'D' (Demand). Two upward-sloping lines are shown: 'S' (original Supply) and 'S1' (new Supply), with an arrow pointing from S to S1 to indicate an increase in supply. The initial equilibrium is at the intersection of S and D, with price <math>P_e</math> and quantity <math>Q_e</math>. The new equilibrium is at the intersection of S1 and D, with a lower price <math>P_1</math> and a higher quantity <math>Q_1</math>. Dashed lines connect these equilibrium points to their respective values on the axes. Arrows also point from the equilibrium price <math>P_e</math> down to <math>P_1</math> and from <math>Q_e</math> right to <math>Q_1</math>.</p> </div> <p><b>Rejection marks</b></p> <ul style="list-style-type: none"> <li>• Options A incorrect since an increase in wages of tea growers would increase production costs and so lead to a decrease in the supply of tea or raise price. <b>(1 mark)</b></li> <li>• Option B incorrect since tea and coffee are substitutes. An increase in the price of coffee should cause the demand for tea to increase – so raising its price. <b>(1 mark)</b></li> <li>• Option D incorrect since sugar and tea are complementary goods. A decrease in price of sugar is likely to cause an increase in demand for tea, so raising its price / accept idea of little or no effect on the price of tea. <b>(1 mark)</b></li> </ul>	<b>(4)</b>

Question Number	Answer	Mark
Q4	<p><b>Correct answer option C (1 mark)</b></p> <ul style="list-style-type: none"> <li>• Definition of cross elasticity of demand or correct formula (the responsiveness in demand for good B due to a change in price of good A, or, <math>\% \Delta QD \text{ good B} \div \% \Delta P \text{ good A}</math>). <b>(1 mark)</b></li> <li>• Goods which have a negative XED are complementary goods / joint demand. <b>(1 mark)</b></li> <li>• Substitutes have a positive XED. <b>(1 mark)</b></li> <li>• Application: an increase in the price of motor vehicles is likely to cause a decrease in demand for petrol (accept vice-versa) <b>(1 mark)</b></li> <li>• Correct diagram depicting a negative XED. <b>(1 mark)</b></li> </ul> <p>Price of Motor vehicles</p>  <p>Quantity demanded for petrol</p> <p><b>Rejection marks</b></p> <ul style="list-style-type: none"> <li>• Option A incorrect since motor vehicles and rail travel are <b>substitutes with a positive XED</b> or, Option D incorrect since bus transport and taxis are <b>substitutes with a positive XED</b>. NB: need both substitutes and positive XED to award <b>(1 mark)</b></li> <li>• Option B incorrect since bus transport and potatoes have no relationship between them / have an XED value of zero / are likely to be inferior goods with a negative income elasticity of demand. <b>(1 mark)</b></li> </ul>	<b>(4)</b>

Question Number	Answer	Mark
Q5	<p><b>Correct option A (1 mark)</b></p> <ul style="list-style-type: none"> <li>• Definition of income elasticity of demand or correct formula (the responsiveness of demand for a good due to a change in income, or, <math>\% \Delta QD \div \% \Delta Y</math>). <b>(1 mark)</b></li> <li>• The demand for fish is income inelastic in both countries since their values are between 0 and 1 or less than 1, or, definition of income inelastic demand (the percentage change in demand is less than the percentage change in income) / demand for fish is more inelastic in Cyprus than Maldives. <b>(1 mark)</b></li> <li>• Application: e.g. a 1% rise in income causes a 0.37% rise in demand for fish in Cyprus and a 0.64% fish in demand for fish in the Maldives. <b>(1 mark)</b>  <b>NB: do not award for referring directly to 0.37 and 0.64.</b></li> <li>• Diagram depicting a positive income elasticity of demand for fish. <b>(1 mark)</b></li> </ul> <div data-bbox="453 981 997 1339" style="text-align: center;"> </div> <p><b>Rejection marks</b></p> <ul style="list-style-type: none"> <li>• Option B incorrect since the income elasticity of demand for oils and fats in Cyprus is perfectly income inelastic, or, a change in income causes no change in demand for oils and fats. <b>(1 mark)</b></li> <li>• Option C incorrect since cereals are an inferior good in Cyprus or a normal good in the Maldives <b>(must use the data)</b>. <b>(1 mark)</b></li> <li>• Option D incorrect since the income elasticity of demand for oils and fats is 0.52 which is less than the demand for fish which is 0.64 in the Maldives. <b>(1 mark)</b></li> </ul>	<b>(4)</b>



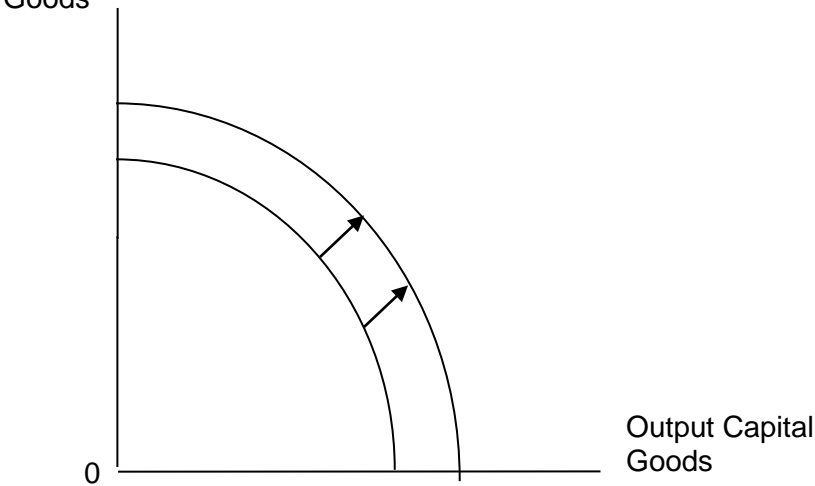
Question Number	Answer	Mark
Q6	<p><b>Correct option D (1 mark)</b></p> <ul style="list-style-type: none"> <li>• Definition or formula for price elasticity of supply (the responsiveness of supply of a good due to a change in its price, or, <math>\% \Delta QS \div \Delta P</math>). <b>(1 mark)</b></li> <li>• Coffee is inelastic since the answer is between 0 and 1 or less than 1 / coffee is inelastic since the percentage change in supply is less than the percentage change in price</li> <li>• Diagram depicting a price inelastic supply curve. <b>(1 mark)</b></li> <li>• Price elasticity of supply of coffee calculation equals 0.33 <b>(1 mark)</b></li> <li>• Explanation of why coffee may be price inelastic supply e.g. long time period to grow or low stock levels. <b>(1 mark)</b></li> </ul> <p><b>Rejection marks</b></p> <ul style="list-style-type: none"> <li>• Option A incorrect since no information on income is provided in the question / rather the information concerns price and supply / the question is not concerned with income elasticity of demand. <b>(1 mark)</b></li> <li>• Option B incorrect since price elastic supply would require an answer above 1. <b>(1 mark)</b></li> <li>• Option C incorrect since unit price elastic supply means the answer is 1 / where the percentage change in supply is equal to the percentage change in price. <b>(1 mark)</b></li> </ul>	<b>(4)</b>

Question Number	Answer	Mark
Q7	<p><b>Correct option B (1 mark)</b></p> <ul style="list-style-type: none"> <li>• Identification that this is an indirect tax / is an ad valorem tax (1 mark)</li> <li>• The effect of the tax is to act like an increase in production costs (1 mark)</li> <li>• Supply curve pivots inwards / a non-parallel leftward shift in supply curve (1 mark)</li> <li>• Annotation of diagram to show an increase in equilibrium price and a fall in output / the tax area. (1+1 marks) OR suitable written explanation of supply decreasing and price increasing. (1 mark)</li> </ul> <div data-bbox="438 683 1021 1198" data-label="Figure"> </div> <p><b>Rejection marks</b></p> <ul style="list-style-type: none"> <li>• Option A incorrect since an outward shift of the supply curve would be the result of a subsidy. (1 mark)</li> <li>• Option C incorrect since as a tax imposed on a good adds to the supply price, so shifting the supply curve rather than the demand curve / an increase in income tax would cause the demand curve to shift inwards / other factors which may shift the demand curve inwards. (1 mark)</li> <li>• Option D incorrect since this is the effect of a specific tax which causes a parallel shift in the supply curve / a specific tax is imposed as a fixed amount per unit of good. (1 mark)</li> </ul>	(4)

Question Number	Answer	Mark
Q8	<p><b>Correct option D (1 mark)</b></p> <ul style="list-style-type: none"> <li>• Explanation of buffer stock (for example, an agency buys or adds to its stocks in times of a good harvest <b>and</b> sells from its stocks in times of a poor harvest / a scheme to stabilise producer incomes. <b>(1 mark)</b>)</li> <li>• Identification that without intervention the price will fall below P1 in 2013 (this may be annotated on the diagram). <b>(1 mark)</b></li> <li>• The agency buys YZ. This may be shown by annotation of the diagram but must be labelled or identified in the answer. <b>(1 mark)</b></li> <li>• Identification of the total area spent by agency adding to its stocks (OP1 multiplied by YZ). This may be shown by annotation of the diagram but must be labelled or identified in the answer. <b>(1 mark)</b></li> </ul> <p><b>Rejection marks</b></p> <ul style="list-style-type: none"> <li>• Option A incorrect since there is a good harvest that leads to an excess supply at the lowest target price / the agency would release stock on to the market in times of excess demand. <b>(1 mark)</b></li> <li>• Option B incorrect since the agency will buy <b>YZ</b> and add to its stockpile / as there is an excess supply / agency will only sell from stockpile when there is a poor harvest. <b>NB: do not double award if this point already credited. (1 mark)</b></li> <li>• Option C incorrect since for price to increase to P2 there has to be a poor harvest below original output W / there is an excess demand. <b>(1 mark)</b></li> </ul>	<b>(4)</b>

Question Number	Answer	Mark
9(a)	<p><b>6 KAA marks</b></p> <ul style="list-style-type: none"> <li>• Definition of renewable resources (resources that can be replenished or sustained for future generations) (<b>1 mark</b>)</li> <li>• Identification of two reasons (<b>1+1 marks</b>) and their development (<b>2+2 or 3+1 marks</b>).</li> <li>• Reasons include: <ul style="list-style-type: none"> <li>➤ <b>To reduce pollution or CO2 emissions:</b> to meet EU targets (do not award for referring to UK targets as it is in the question) / tidal power is carbon neutral in operation and so environmentally friendly / slows the impact of global warming or climate change / reduce danger of flooding / floods in 2007 led to £3.2 billion of damage / reduce costs of cleaning up after fossil fuels.</li> <li>➤ <b>To diversify UK energy sources:</b> the economy becomes less reliant on fossil fuels / less dependent on imports of fossil fuels / long term price of fossil fuels likely to rise as they run out.</li> <li>➤ <b>To have a sustainable energy source:</b> tidal power is a constant source of energy / a reliable source of energy / the tidal barrage is expected to last 120 years / it will increase the supply of energy / fossil fuel energy sources are running out.</li> </ul> </li> </ul> <p><b>NB: Accept a mixture of these points.</b></p>	<b>(6)</b>

Question Number	Answer	Mark
9(b)	<p><b>4 KAA marks</b></p> <ul style="list-style-type: none"> <li>• Explanation of subsidy (government grant to increase production / reduce production costs). <b>(1 mark)</b></li> <li>• The £34 billion funding of the tidal barrage would come from private investors, for example overseas investors. <b>(1 mark)</b></li> <li>• The costs of the scheme would be passed on to consumers through higher electricity prices. <b>(1 mark)</b></li> <li>• Energy is price inelastic in demand / so total revenue and profits might increase as prices rise. <b>(1+1 marks)</b></li> <li>• Some development offered: the scheme may be profitable over the long time period it operates / low interest rates on savings may make capital projects more attractive / UK government may relax regulations on pricing of electricity. <b>(1+1+1 marks)</b></li> <li>• Award for other possible reasons why project can proceed without funding e.g. tax breaks / local authority support and charity support. <b>(1 mark)</b></li> </ul>	<b>(4)</b>

Question Number	Answer	Mark
9(c)	<p><b>6 KAA marks</b></p> <ul style="list-style-type: none"> <li>• Definition of production possibility frontier (e.g. maximum output an economy can achieve when all its resources are fully or efficiently employed). <b>(1 mark)</b></li> <li>• Diagram of a Production possibility frontier depicting an outward shift in the curve / suitable labelling of axes e.g. capital goods versus consumer goods or private goods versus public goods or tidal barrage versus alternatives. <b>(1+1 marks)</b></li> </ul> <p><b>NB: award a maximum of 4 KAA marks if no appropriate diagram offered</b></p> <ul style="list-style-type: none"> <li>• The tidal barrage represents an increase in the capital stock or capital goods or investment / this is likely to increase potential output or economic growth. <b>(1+1 marks)</b></li> <li>• Award for 30 000 jobs created <b>only</b> if linked to infrastructure and new factories.</li> <li>• Tidal barrage will provide an energy source to enable future production of goods and services for many years. <b>(1 mark)</b></li> <li>• Tidal barrage may lead to further investment programmes e.g. road and rail links in the region / factory to build turbines and a new dock / multiplier effects. <b>(1+1 marks)</b></li> <li>• The project may attract more domestic or foreign direct investment e.g. funding is likely to be from overseas / this could increase production possibilities further. <b>(1+1 marks)</b></li> <li>• Less flooding risks so production not disrupted as in recent years. <b>(1 mark)</b></li> </ul> <p>Output Consumer Goods</p>  <p>Output Capital Goods</p>	<b>(10)</b>

	<p><b>Evaluation (2+2 or 1+3 or 1+1+2 marks)</b></p> <ul style="list-style-type: none"> <li>• Discussion of impact on fishing and tourist industries and how their output might be affected.</li> <li>• Discussion of magnitude of project; just 5% of UK energy needs so may not have massive impact / discussion of the significance of 30 000 jobs created to the local or national economy.</li> <li>• Accept idea of an opportunity cost to the tidal barrage / this may be referred to in a movement along the PPF curve.</li> <li>• Unemployed resources may be used up and so increasing output closer to its production possibility potential rather than cause a shift the curve outwards / so that it is closer to full employment level of output.</li> <li>• Discussion of time period: it may take many years to build / but the impact is likely to be over 120 years / many of the 30 000 jobs created may be short term.</li> <li>• Discussion of funding: the overseas funding suggests income stream from the project will go abroad / accept macro arguments on impact on trade balance.</li> <li>• Discussion that there might be no change to the production possibility frontier since renewable energy is just replacing non-renewable energy power stations.</li> <li>• Tidal barrage may be unproven technology.</li> </ul>	
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Question Number	Answer	Mark
9(d)	<p><b>8 KAA marks (2+2+2+2 or 3+3+2)</b></p> <p>Factors influencing the supply of labour include:</p> <ul style="list-style-type: none"> <li>• Definition of supply of labour (quantity or quality of labour supplied at a given wage rate)</li> <li>• Diagram of either a movement along a supply curve for labour (which must be explained) or a shift in the supply curve for labour.</li> <li>• The wage rate or earnings: as the wage rate rises then so too will the supply of labour / since greater financial incentive to work longer hours.</li> <li>• Net advantages in construction of the tidal barrage: these may include bonuses / possible dangerous working conditions / sick pay and paid holidays / job satisfaction job security.</li> <li>• The level of training, qualifications, skills or work experience required: the high level of qualifications and skills on building turbines may limit the supply of labour.</li> <li>• Income tax or National Insurance Contributions: the lower the rate of income tax then the greater the disposable income / the greater the incentive to work or supply of labour.</li> <li>• Government social security benefits: cuts in the Job seekers' Allowance and Housing Benefits / may increase incentive to work or supply of labour / especially for low skilled areas of construction work.</li> <li>• Reference to the National Minimum Wage: an increase in NMW may raise incentive to work / so more supply of labour</li> <li>• The raising of school leaving age or retirement age: it may increase supply of labour for the project.</li> <li>• Net migration inflows to UK / membership of the Single European Market has increased net migration flow of labour to UK.</li> <li>• Trade Unions may affect rate of pay or other working conditions / e.g. more job security or safety at work.</li> <li>• Accept factors which may affect the regional or local supply of labour e.g. local house rental prices / local facilities such as public transport.</li> <li>• General state of labour market or economy / high unemployment may lead to greater supply of labour for tidal barrage project. Demographic factors e.g. population increase / increase in retirement age.</li> </ul>	<b>(14)</b>



**NB: award a maximum of 6 KAA marks if no reference to the tidal barrage scheme. One reference to the barrage is sufficient to award the full KAA marks.**

**Evaluation 6 marks (2+2+2 or 3+3 or 4+2 marks)**

- Prioritisation of factors e.g. availability and rental price of local housing likely to be very important compared to a change in NMW / geographical mobility of labour.
- Discussion of elasticity of the supply of labour.
- Many construction workers earning well above NMW so little impact / some labour may work below NMW.
- Discussion of type of construction work and variety of skills required: some work is highly skilled and so this may limit the supply of labour / e.g. engineers to build dams / other occupations in building the tidal barrage are less skilled e.g. building labourers.
- Supply of labour may increase over time / more knowledge of job vacancies or time to gain skills for the work.
- Accept discussion of income and substitution effects / backward sloping supply curve for labour.
- Accept discussion of measures to increase the supply of labour e.g. housing subsidies or training courses and other supply side policies.

**NB: a maximum of 4 marks available for discussion of measures to increase supply of labour.**

**The quality of written communication will be assessed in this question based on the candidate's ability:**

- To present an argument and conclude on the basis of that argument.
- To organise information clearly and coherently.
- To use economics vocabulary appropriately.
- To use grammar, spelling and punctuation appropriately.

Question Number	Answer	Mark
9(e)	<p><b>8 KAA marks</b></p> <p>A variety of measures can be used which include:  <b>subsidies of renewable energy schemes (other than the tidal barrage), minimum pricing for renewable energy schemes, taxation of non-renewable energy, tradable carbon permits, regulation and deregulation.</b></p> <p><b>Regulations may come in various forms, for example, relaxation of planning laws, carbon-offsetting, renewable energy certificates.</b></p> <p>NB: accept nuclear power as a renewable energy source.</p> <p><b>Two measures: (4+4 or 5+3 or 6+2)</b></p> <ul style="list-style-type: none"> <li>• Subsidies for renewable energy schemes / lower production costs / raise supply and reduce price / encourage firms into the market / raise producer surplus or profits / application to specific schemes. <ul style="list-style-type: none"> <li>➤ Award up to 2 marks for diagram (increase in supply curve / subsidy area).</li> </ul> </li> <li>• Taxation of non-renewable energy producers / higher production costs / lower supply and raise price / firms may exit market / lower producer surplus or profits / tax revenue can be used to subsidise renewable schemes / application to specific schemes. <ul style="list-style-type: none"> <li>➤ Award up to 2 marks for diagram (decrease in supply / tax area).</li> </ul> </li> <li>• Regulations: this may take various forms such as tighter planning controls for non-renewable energy schemes / looser planning controls on renewable energy schemes / these may raise or lower production costs. Regulations could include Renewable energy certificates, carbon offsetting.</li> <li>• Tradable pollution permits / cap and trade system / penalises heavy polluters who have to buy extra permits / incentive for firms to reduce pollution and sell spare permits / pollution permits can be reduced over time. <ul style="list-style-type: none"> <li>➤ Award up to 2 marks for diagram (decrease in supply of permits / identification of higher price).</li> </ul> </li> <li>• Minimum price schemes for renewable energy / being proposed for nuclear power / ensure long term returns for the investment / impact on price and output.</li> </ul>	<b>(14)</b>

- Award up to 2 marks for diagram (demand and supply diagram / minimum price set above free market price).

**NB: If just one measure considered cap at 6 KAA marks**

**NB: If more than two measures discussed, award for the best two responses.**

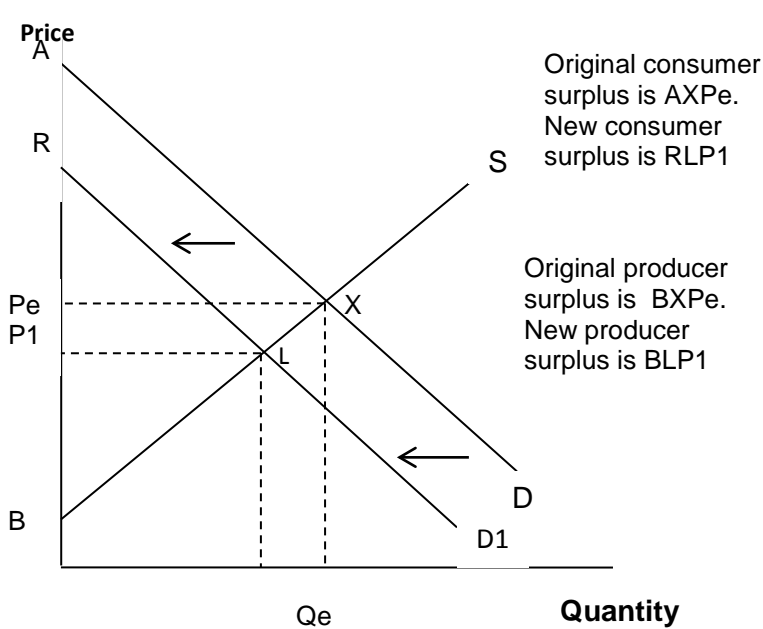
**Evaluation 6 marks (2+2+2 or 3+3 marks)**

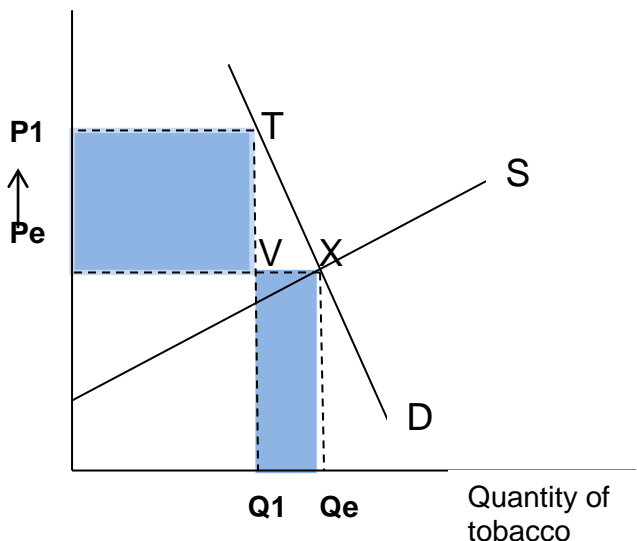
- Tax revenue may not be used for renewable energy / discussion of price elasticity of demand for fossil fuels.
- Subsidies have an opportunity cost for government / development of point.
- Subsidies may create inefficiencies / dependency of the firms.
- Specific issues with renewable energy, for example, reliability of wind power and solar power / external costs of renewable energy such as damage to wildlife.
- Problems with tradable pollution permits e.g. over-supply / extension of scheme to airlines.
- Renewable energy certificates may increase production costs for firms.
- Minimum price will increase consumer energy bills / lead to an increase in fuel poverty.
- Discovery of non-renewable resources and their development may reduce costs and increase supply e.g. fracking of gas and oil – so less need for renewable energy.
- Issues of magnitude and time period.
- Cost of monitoring and enforcing the schemes.
- General issues concerning Government failure e.g. setting the correct level of tax or subsidy to internalise externality.

**The quality of written communication will be assessed in this question based on the candidate's ability:**

- To present an argument and conclude on the basis of that argument.
- To organise information clearly and coherently.
- To use economics vocabulary appropriately.
- To use grammar, spelling and punctuation appropriately.

Question Number	Answer	Mark
10(a)	<p><b>4 KAA marks (2+2 marks)</b></p> <ul style="list-style-type: none"> <li>• Explicit reference to Figure 1 which depicts the decline in tobacco smoking (for example, a decline in adult smokers from around 28 per cent in 1998 to 20 per cent in 2010). <b>(1 mark)</b></li> <li>• Identification of two causes of the decline in tobacco smoking <b>(1+1 marks)</b></li> <li>• Development of the two reasons <b>(1+1 marks)</b></li> </ul> <p>Reasons include:</p> <ul style="list-style-type: none"> <li>➤ <b>Government health campaigns:</b> these increase market knowledge on the harmful effects of smoking / examples include use of television, radio and newspaper campaigns / health awareness campaigns in schools.</li> <li>➤ <b>Increase in taxes on tobacco:</b> it is now 80% of the price (do not double award) / this reduces its affordability / link to low income groups or children / example of the tax increase from the 2012 Budget where a 37 pence tax increase was imposed on a packet of cigarettes OR tax on cigarettes increasing at 5 per cent above the rate of inflation / a real increase in tax on cigarettes / cigarette tax escalator set to continue in future years.</li> <li>➤ <b>Regulations on the sale of tobacco smoking:</b> Examples include an increase in the age of buying tobacco from 16 years to 18 years / tobacco cannot be on view in shops / plain packaging / health warnings on cigarette packets / ban on tobacco sales from vending machines / tobacco advertising ban.</li> <li>➤ <b>Regulations on the consumption of tobacco smoking:</b> Examples include a ban on smoking in enclosed public places and work places such as shops and restaurants / increase in age of buying tobacco from 16 to 18 years.</li> </ul> <p><b>NB: Accept other reasons for the decline in tobacco smoking</b> (for example, healthier lifestyles, increase in incomes, and development of effective substitutes such as e-cigarettes).</p>	<b>(4)</b>

Question Number	Answer	Mark
10(b)	<p><b>6 KAA marks</b></p> <ul style="list-style-type: none"> <li>• Consumer and producer surplus are likely to fall (need to mention that <b>both</b> have fallen) (1 mark)</li> <li>• Definition of consumer surplus (e.g. the difference between the price consumers are willing to pay for a good and the actual market price OR stating the area below the demand curve and above equilibrium price) (1 mark).</li> <li>• Definition of producer surplus (e.g. the difference between the price producers are willing to supply a good for and the actual market price OR stating the area above the supply curve and below the equilibrium price) (1 mark).</li> <li>• Diagram (up to 4 marks) <ul style="list-style-type: none"> <li>i. Original areas of consumer and producer surplus (both must be identified) (1)</li> <li>ii. An inward shift in the demand curve for tobacco (1)</li> <li>iii. New consumer area identified / or the change in consumer surplus identified (1)</li> <li>iv. New producer surplus area identified / or the change in producer surplus identified (1)</li> </ul> </li> </ul>  <ul style="list-style-type: none"> <li>• NB: Accept relevant diagram which depicts a decrease in the supply curve for tobacco and the original and new areas of consumer and producer surplus identified (up to 4 marks)</li> </ul> <p><b>NB: cap at maximum of 3 marks if no suitable diagram offered</b></p>	(6)

Question Number	Answer	Mark
10(c)	<p><b>6 KAA marks</b></p> <ul style="list-style-type: none"> <li>• Definition or formula of price elasticity of demand. (1 mark)</li> <li>• Explanation of price inelastic demand (the percentage change in demand is less than the percentage change in price) or numerical application: for example, a 10% rise in price of tobacco might cause a 2% fall in demand. (1 mark)</li> <li>• Reference to Extract 2: Demand for tobacco smoking is likely to be price inelastic since total expenditure has increased following a price rise / use of data e.g. consumer expenditure on tobacco increased from £15.1 billion to £15.3 billion following price rise (1 + 1marks)</li> <li>• Diagram depicting a price inelastic demand curve / showing an expenditure or revenue increase from a price rise (up to 2 marks)</li> </ul> <p>Price £</p>  <p><b>NB: accept supply curve shifts depicting a tax increase.</b></p> <ul style="list-style-type: none"> <li>• Tobacco smoking is addictive or habit forming / development of this point (e.g. due to nicotine or socialising) (up to 2 marks)</li> <li>• Tobacco smoking has no close substitutes / development of this point (e.g. plastic pipes and chewing gum are weak alternatives) (up to 2 marks)</li> <li>• Tobacco smoking takes up a small percentage of income / development of this point (e.g. still relatively cheap at £7.40 a pack which could last some time) (up to 2 marks)</li> <li>• Extract 2 suggests tobacco smoking is more price inelastic in demand for the manual class workers (29% still smoke) / development of this point (e.g. less</li> </ul>	(10)

	<p>receptive to health warning campaigns or less concerned about the long term implications of smoking).</p> <ul style="list-style-type: none"> <li>• Extract 2 suggests tobacco smoking is more price inelastic for a minority of teenagers / as the proportion of 11-15 year olds smoking has not changed over the last 5 years / development of this point (e.g. what constitutes a regular smoker or questioning the data since these children will be restricted by income).</li> </ul> <p><b>Evaluation (2+2 or 3+1 or 2+1+1 or 4+0 marks)</b></p> <ul style="list-style-type: none"> <li>• Price elasticity of demand may vary between different types of brands of tobacco / development of this point (e.g. switch to lower quality cheaper cigarettes suggest demand is price elastic for these / comprising some 30% of the market).</li> <li>• Consideration of shifts in the demand curve rather than movement along the demand curve for tobacco / other factors have affected demand than price e.g. health campaigns and change of lifestyle.</li> <li>• Discussion of smoking statistic for teenagers / expect increases in tax to cause reduction in smoking rates as typically they have low incomes.</li> <li>• Price elasticity may vary over time e.g. a large drop in tobacco smoking from 45% to 20% of adult population between 1974 and 2010.</li> <li>• Price elasticity of demand may vary between countries / development with use of an example.</li> <li>• New technology / development of new substitutes such as e-cigarettes affect price elasticity of demand.</li> <li>• Discussion on the reliability of the information provided / development of this point (since it is from the anti-smoking pressure group ASH) / the data might not include influence of smuggling.</li> </ul>	
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Question Number	Answer	Mark
10(d)	<p><b>8 KAA marks (2+2+2+2 or 3+3+2)</b></p> <ul style="list-style-type: none"> <li>• There might be a reduction in market failure in the tobacco market since the Private costs and external costs associated with tobacco smoking will fall (<b>1 mark</b>)</li> <li>• Diagram of social, external and private costs / depicting a decrease in external costs. (<b>1+1 marks</b>)  <b>NB: this could also be shown by a relevant social, external and private benefits diagram.</b></li> </ul> <ul style="list-style-type: none"> <li>• <b>Consumers benefit:</b> <ul style="list-style-type: none"> <li>➤ Better health and longer life expectancy / ASH refers to two-thirds of smokers die from their habit.</li> <li>➤ Less passive smoking or cleaner air / more people may visit restaurants and pubs.</li> <li>➤ Improved NHS as lower waiting times to receive treatment.</li> <li>➤ More income available to spend elsewhere</li> <li>➤ Consumers may benefit from less house fires e.g. £0.5 billion.</li> </ul> </li> <li>• <b>Government benefit:</b> <ul style="list-style-type: none"> <li>➤ Reduction in government borrowing or an improvement in its finances.</li> <li>➤ National Health Service should benefit from treating fewer smoking related patients the £2.7 billion cost should fall / divert resources to other areas of health care</li> <li>➤ More tax revenue from people in work / possible to raise retirement age.</li> <li>➤ Less spending on disability benefits through smoking related illnesses.</li> <li>➤ Less government expenditure on cleaning up litter.</li> </ul> <p style="text-align: center;"><b>NB: cap at 6 KAA marks if no reference made to both consumers and government.</b></p> </li> </ul> <p><b>6 Evaluation marks (2+2+2 or 3+3 or 1+1+1+1+2)</b></p> <ul style="list-style-type: none"> <li>• Difficult to place a monetary value on the benefits of a reduction in smoking / e.g. how to value improved health or life expectancy.</li> <li>• Some consumers actually enjoy tobacco smoking so this benefit may be reduced / undermine individual freedom.</li> <li>• Extract 3 mentions more than 1500 pubs closing down and linked to smoking ban in enclosed public places / loss of direct taxation revenue and possible higher spending on benefits.</li> </ul>	<b>(14)</b>



- Government may lose tax revenue over time / it was £12.1 billion from indirect taxes on tobacco in 2012.
- Government spending may increase on the ageing population as non-smokers live longer / such as state pensions and NHS costs.
- Discussion of time period or magnitude: Figure 1 indicates there is a long term trend of the decline in smoking and ASH indicates it may take a further 50 years to eliminate smoking.
- Discussion of prioritisation: the reduction in smoking is not so successful among manual workers / a persistent proportion of 11-15 year olds still smoke.
- Questioning the data: accuracy of the estimates on the costs of tobacco smoking to society / tobacco smuggling could exaggerate the fall in tobacco smoking / the benefits from reduction in smoking may be exaggerated.

The quality of written communication will be assessed in this question based on the candidate's ability:

- To present an argument and conclude on the basis of that argument.
- To organise information clearly and coherently.
- To use economics vocabulary appropriately.
- To use grammar, spelling and punctuation appropriately.

Question Number	Answer	Mark
10(e)	<p><b>8 KAA marks</b></p> <ul style="list-style-type: none"> <li>• Definition of government failure (government intervention leads to a misallocation of resources / leads to a net welfare loss). <b>(1 mark)</b></li> </ul> <p><b>NB: Be prepared to accept one view as KAA and the other as evaluation</b></p> <p><b>Government failure since:</b></p> <ul style="list-style-type: none"> <li>• High tobacco taxes may have encouraged illegal smuggling of tobacco / as 80 per cent of the price of cigarettes comprises tax or 20 per cent of cigarettes smoked in Britain are illegal / encourages people to break the law. <b>(1+1 marks)</b></li> <li>• Counterfeit) cigarettes may be more harmful than branded cigarettes / some development e.g. plain packaging regulation may it easier to counterfeit cigarettes. <b>(1+1 marks)</b></li> <li>• High tobacco taxes may increase inequality / since a greater proportion of lower income groups smoke (29%) than higher income groups (13%). <b>(1+1 marks)</b></li> <li>• Unintended consequences: Government regulations or high taxes may have contributed to closure of pubs and shops or a decrease in employment / increase in losses or fall in profits. <b>(1+1 marks)</b></li> <li>• Costs of monitoring and enforcing regulations / some development e.g. under-age smoking or funding border customs. <b>(1+1 marks)</b></li> <li>• Accept critical approach to other regulations not mentioned in extracts. <b>(1+1 marks)</b></li> </ul> <p><b>6 Evaluation marks (2+2+2 or 3+3)</b></p> <p><b>Not government failure since:</b></p> <ul style="list-style-type: none"> <li>• Without government intervention there would be a much greater market failure / use of data from Figure 1.</li> <li>• The tobacco tax helps to pay for the costs of smoking or internalise external costs / development of this point e.g. the £12.1 billion tobacco tax revenue covers a large portion of the £13.7 billion estimated total costs of smoking / reduce effects of passive smoking.</li> <li>• Government can reduce asymmetric information or imperfect knowledge / development of this point e.g. public health campaigns so consumers realise the true costs of tobacco smoking / reduce problem of myopia among tobacco smokers.</li> <li>• Government intervention can reduce the chances of addiction to a dangerous substance / development of this point e.g. high tobacco taxes may discourage teenagers from smoking.</li> </ul>	<b>(14)</b>

	<ul style="list-style-type: none"><li>• Government intervention help reduce tobacco smoking among children / development of this point e.g. ban on advertising or selling to under 18 year olds / ban on selling cigarettes in vending machines which children can often use.</li><li>• High tobacco taxes may not be significant cause of tobacco smuggling / Spain and Italy have much lower tobacco taxes but higher rates of smuggling.</li><li>• Government intervention can increase the quality of life / raise life expectancy.</li><li>• Government intervention may increases output of labour at work / higher profits.</li><li>• Government intervention can reduce pressure on NHS / enable resources to be diverted to treat other illnesses.</li></ul> <p>The quality of written communication will be assessed in this question based on the candidate's ability:</p> <ul style="list-style-type: none"><li>➤ To present an argument and conclude on the basis of that argument.</li><li>➤ To organise information clearly and coherently.</li><li>➤ To use economics vocabulary appropriately.</li><li>➤ To use grammar, spelling and punctuation appropriately.</li></ul>	
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