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Mark Scheme (Results)

Summer 2016

Pearson Edexcel GCE
in Economics (6EC01)
Paper 01 Competitive Markets: How they work and why they fail

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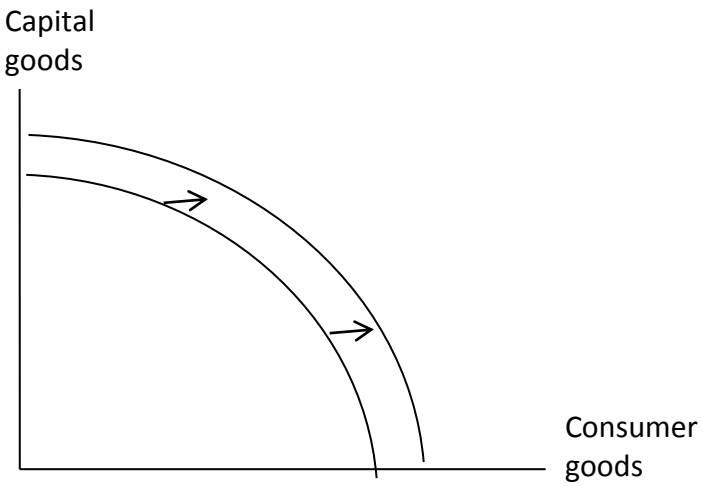
General Marking Guidance

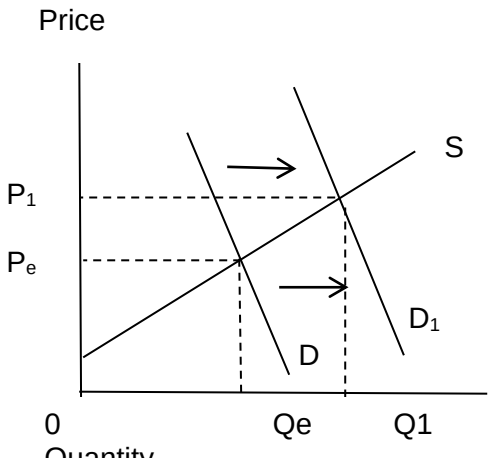
- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should 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.

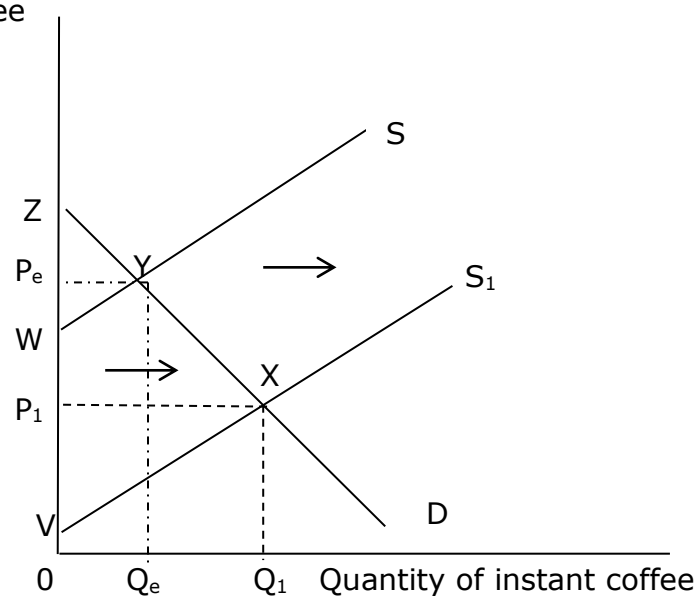
FOR ALL QUESTIONS: No markscheme can cover all possible responses. Therefore, reward analysis which is relevant to the question even if this is not specifically identified in the markscheme.

NB: Up to 3 marks can be awarded for rejecting 3 incorrect options if a valid reason is given (with 1 mark for each option rejected).

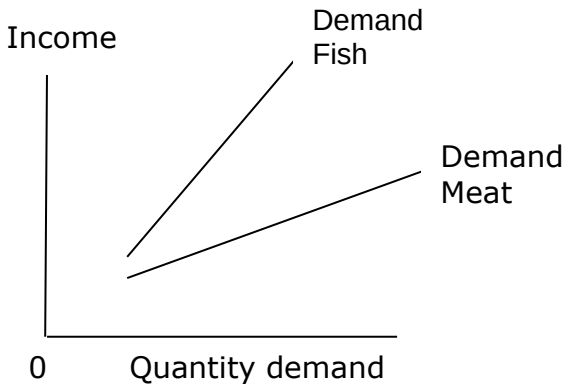
NB: Up to 3 explanation marks can be awarded even if candidate selects incorrect key.

Question Number	Answer	Mark
1	• **D (1 mark)** • Definition of production possibility frontier (maximum output potential for an economy when all its resources are fully / efficiently employed). (**1 mark**). • Explanation of the effects of economic growth on the production possibility frontier e.g. it will shift outwards (this may be annotated on diagram) **OR** award for definition of economic growth e.g. an increase in real output / an increase in the productive capacity of an economy.(**1 mark**)  • Application to question: more capital goods are being produced at W / capital goods help to produce more goods in the future. (**1 mark**) **Rejection marks** • Option A incorrect since the opportunity cost of 50 consumer goods is 10 capital goods. (**1 mark**) • Option B incorrect since there is full employment of resources at V since it is on the production possibility frontier. (**1 mark**) • Option C incorrect since the opportunity cost of 180 consumer goods is 130 capital goods. (**1 mark**)	**(4)**

Question Number	Answer	Mark
2	• **C (1 mark)** • Definition of price mechanism (e.g. the interaction of supply and demand to allocate resources / the use of market forces to allocate resources). (**1 mark**) • Written explanation of the price mechanism functioning e.g. an increase in demand will raise price and so give a signal to firms to raise output / due to the profit motive **OR** a decrease in demand will reduce price and so signal to firms to reduce output / due to the profit motive. (**1+1 marks**) • Diagram showing a rise in demand leading to a higher price and more output **OR** a fall in demand leading to a lower price and less output. **(1 mark)**  **Rejection marks** **Accept suitable explanations but not a simple reversal of option keys** • Option A incorrect since to eliminate a surplus, price needs to fall so that '**quantity demand equals supply'** / an increase in price will only make the surplus greater as the market moves away from equilibrium (**1 mark**). • Option B incorrect since price fluctuations is part of the operation of the price mechanism in allocating scarce resources to reach equilibrium in the market / buffer stocks schemes or minimum price schemes are typically used to reduce price fluctuations. (**1 mark**) • Option D incorrect since government intervention is to correct market failure such as low prices for harmful goods e.g. tobacco and alcohol. (**1 mark**)	**(4)**

Question Number	Answer	Mark
3	• **B (1 mark)** • Definition of producer surplus (the '**difference'** between the price firms are willing to supply a good for and the actual market price / the area above the supply curve and below the market price). (**1 mark**) • New technology in the production of instant coffee leads to a lower cost of production. (**1 mark**) • Diagrammatic explanation depicting: ➢ The increase in the supply curve with equilibrium positions. (**1 mark**) ➢ The original producer surplus (e.g. PeYW). (**1 mark**) ➢ The new producer surplus (e.g. P_1XV). **(1 mark)** **OR** a written explanation to this effect. (**1 mark**) Price per kilo instant coffee  **Rejection marks** • Option A incorrect since tea and coffee are substitutes. An increase in consumption of tea is likely to cause a decrease in demand for coffee (and so reduce producer surplus). (**1 mark**) • Option C incorrect as poor coffee harvest will increase production costs for instant coffee / decrease the supply of coffee. (**1 mark**) • Option D incorrect as an increase in indirect taxes will shift supply curve for instant coffee inwards. (**1 mark**)	**(4)**

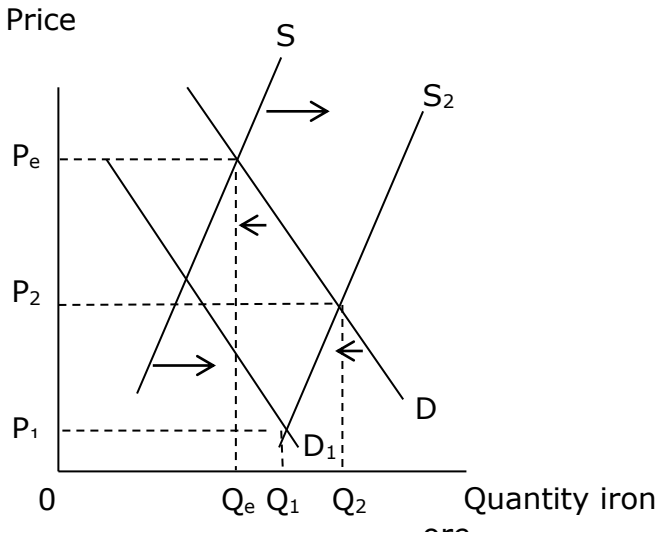
Question Number	Answer	Mark
4	• **B** (**1 mark**) • Definition of price elasticity of demand or correct formula (the responsiveness of demand for a good due to a change in its price) or (%ΔQD ÷ %ΔP = PED). **OR** Explanation of price elastic demand (a rise price will cause a greater proportionate fall in demand). (**1 mark**). • Definition of total revenue (the total amount of money received by producers from selling a given quantity of a good / price multiplied by total quantity = total revenue). (**1 mark**) • Calculation of the decrease in total revenue from £150,000 to £120,000 or a reduction of £30,000 / this can be shown by annotation of the diagram. (**1 mark**) • Calculation of price elasticity of demand: -33% ÷ +20% = -1.65 (**1+1 marks**). **NB: Accept answer without minus sign** **NB: Award 1 mark for correct workings if the final calculation is incorrect**	**(4)**

Question Number	Answer	Mark
5	• **D (1 mark)** • Definition of income elasticity of demand or correct formula (the responsiveness of demand for a good due to a change in income) or (%ΔQD ÷ %ΔY = YED). (**1 mark**) • Meat is income elastic in demand (or above 1) compared to Fish which is income inelastic in demand (or below 1). (**1 mark**) **NB: Do not double award with use of rejection technique** • Normal goods have a positive income elasticity of demand (such as meat, milk, eggs and fish). (**1 mark**) • Numerical application, for example, a 10% increase in income leads to a 12% increase in demand for meat or a 7% increase in demand for fish. (**1 mark**) • Diagram depicting demand for meat having a higher income elasticity of demand than that for fish. (**1 mark**)  **Rejection marks** • Option A incorrect since no information is provided on price elasticity of demand / option B incorrect since no information is provided on cross elasticity of demand. (**1 mark**) **NB: Award up to 1 mark for rejection of options A and B if the reasons given are the same.** • Option C incorrect since inferior goods have a negative income elasticity of demand or minus figures / the three goods have a positive income elasticity of demand and so are normal goods. (**1 mark**).	**(4)**

Question Number	Answer	Mark
6	• **A (1 mark)** • Definition of market failure (the price mechanism fails to allocate resources efficiently / leads to a net welfare loss). (**1 mark)** • Definition of public goods (non-rivalry and non-excludability). Also accept 'non-rejectable' if included as one of the two characteristics required. **(1 mark)** • Definition of a free market economy (resources are allocated by the price mechanism - so no government intervention). (**1 mark**) **NB: a maximum of 2 marks available for definitions** • Explanation of free rider problem: it is possible for people to consume street lighting without paying for it once it is provided / little incentive for producers to provide sufficient quantities as they cannot charge consumers of the good. (**1+1 marks**. **Rejection marks** • Option B incorrect since an increase in the national minimum wage which causes unemployment is an example of government failure. (**1 mark**) • Option C incorrect since the price mechanism internalising external benefits from higher education means the market is working efficiently as MSB=MSC / the social optimum output position is reached. (**1 mark**) • Option D incorrect since oil exploration firms exiting a market in response to a decrease in demand is the price mechanism operating to allocate resources efficiently / an example of the market working efficiently to reach a new equilibrium. (**1 mark**)	**(4)**

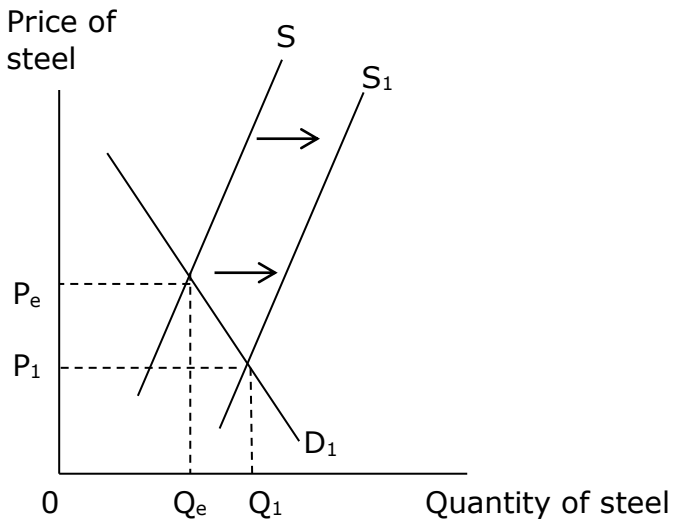
Question Number	Answer	Mark
7	• **C (1 mark)** • Definition of welfare gain (the excess of social benefit over social cost for a given quantity). (**1 mark**) • Identification or annotation of diagram to identify welfare gain as area MTZ (accept welfare loss). (**1 mark**) • Identification of (T) (output Q_2) as the social optimum position and (Z) (output Qe) as the free market equilibrium position. (**1 mark**) • Definition of external benefits: (positive third party effects / benefits external to an exchange / benefits the price mechanism ignores / benefits outside the market transaction / difference between social benefits and private benefits / positive spillover effects). (**1 mark**) **NB: do not award for definition of external cost** • Application to vaccinations: welfare gain or external benefits include a reduction in the spread of diseases since more people vaccinated / more profits for firms as less absenteeism from work due to ill health. (**1 mark**). **Rejection marks** • Option A incorrect since the free market output (Qe) or (Z) is less than the social optimum output (Q_2) or (T) (**1 mark**). **NB: Do not double award** • Option B incorrect since marginal social cost is Z (or Pe) which is less than marginal social benefit of M (or P_3). (**1 mark**) **NB: must refer to Z (or Pe) and M (or P_3) to award a mark** • Option D incorrect since supply equals demand at the free market price / MPC=MPB at the free market price. (**1 mark**).	**(4)**

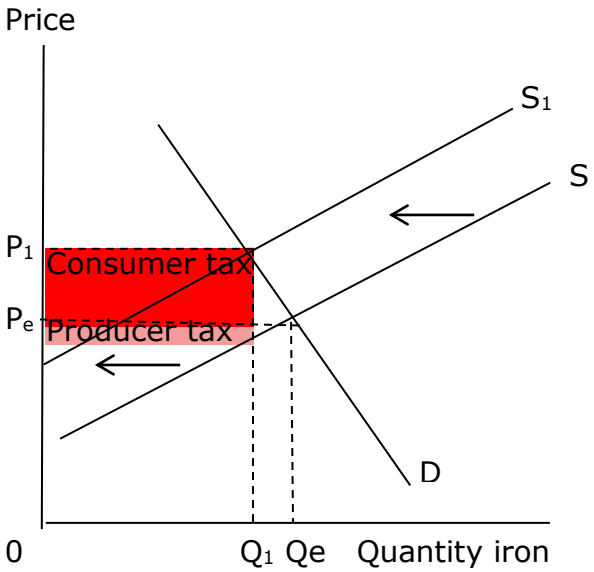
Question Number	Answer	Mark
8	• **B (1 mark)** • Explanation of buffer stock (for example, an agency buys or adds to its stocks in times of a good harvest and sells from its stocks in times of a poor harvest). (**1 mark**) • Identification that without intervention the price will rise above P_2 in 2016 (this may be annotated on the diagram). (**1 mark**) • The agency sells WX from its stockpile. This may be shown by annotation of the diagram but must be labelled or identified in the answer. (**1 mark**) • The agency gains revenue of $0P_2$ multiplied by WX by selling its stocks. This may be shown by annotation of the diagram but must be labelled or identified as in the answer. (**1 mark**) **Rejection marks** • Option A incorrect since there is a poor harvest that leads to an excess demand for wheat of WX. • Option C incorrect since for price to decrease to P_1 there has to be a harvest of output Z. (**1 mark**) • Option D incorrect since the agency will only buy wheat if a very good harvest (beyond output Z). (**1 mark**) **NB: do not double award**	**(4)**

Question Number	Answer	Mark
9(a)	**KAA = 4 marks** • **NB: to achieve the full 4 marks the response must include both demand and supply factors – otherwise cap at 3 marks.** • Explicit use of data from Figure 1 on fall in price of iron ore since September 2013 e.g. from $134 per tonne to $93 per tonne / around 30% fall in price. (**accept approximations of these figures**). (**1 mark**) • Price has decreased due to an increase in supply / production of iron ore from the world's four largest miners of the commodity. (**1+1 marks**) • Price has decreased due to a decrease in demand / falling consumption of iron ore from China, the world's biggest customer. (**1+1 marks**) • Award for a diagram (**up to 2 marks**) ➢ Increase in supply curve with new equilibrium price. (**1**) ➢ Decrease in demand curve with new equilibrium price. (**1**) **NB: candidates are not required to draw diagram to gain full marks**  	**(4)**

Question Number	Answer	Mark
9(b)	**KAA = 6 marks** • **NB: Only award marks for the effects on the producers of iron ore.** • The fall in price of iron ore is likely to reduce revenue **or** profits **or** producer surplus for iron ore producers / share prices have fallen / dividends likely to fall for shareholders / less funds for investment in long run. (**1+1+1 marks**) • Award for accurate diagram depicting new and old producer surplus. (**1 mark**) • Producers may make losses or exit the industry / reference to Figure 2 which shows some mining companies to be highly vulnerable to falling prices e.g. Gindalbie Metals and Grange resources / link the price of ore ($93) to cost of mining the ore for one or more of the companies in Figure 2. (**1+1+1 marks**) • Danger of less competition in the industry as firms exit or new projects are not started as mentioned in Extract 1 / development of the point e.g. lead to market failure where firms might exploit consumers via higher prices in long run. (**1+1 marks**) • Iron ore producers forced to cut production costs or increase efficiency / development of point e.g. shut down marginal mines or cut wages or employment / redundancies paid. (**1+1+1 marks**) • It may lead to merger activity among the iron ore producers / development of point e.g. Glencore bid for Rio Tinto. (**1+1 marks**).	

	Evaluation: 2+2 or 3+1 or 1+1+2 marks ➢ Evaluative use of data. ➢ Low-cost producers are likely to gain an increase in market share / may end up with higher revenue and profits in the long term / reference to Figure 2 which indicate that Rio Tinto and BHP have lowest costs and so room for further price cuts. ➢ Discussion of future demand / higher future prices: Extract 1 refers to expected growth in long term demand from China and other Asian countries which will help to raise prices. ➢ Discussion on magnitude of price fall e.g. Figure 1 shows around a 30% or one-third fall in two years / discussion of the increase in production capacity and how this may depress prices for a long period of time. ➢ Iron ore producers may also produce other goods such as steel and so may not lose out from falling prices / they mine other commodities and so can cope with falling revenues or profits in part of their business. ➢ Iron ore producers may use cash reserves or other sources of finance to stay in the industry.	**(10)**

Question Number	Answer	Mark
9(c)	**KAA = 6 marks** • Falling price of iron ore will reduce production cost for producing steel. (**1 mark**). • The production or supply of steel may increase and so lead to a fall in price (**1 mark**). • Further development of impact on the market for steel e.g. higher consumer surplus or producer surplus / some steel firms are adding to their stockpiles / consideration of price elasticity of demand. (**1+1 marks**) • NB: do not award for reference to complementary goods. • Diagram (**up to 3 marks**) ➢ Original demand and supply of steel with equilibrium price and quantity (**1**) ➢ Increase in supply of steel (**1**) ➢ New equilibrium price and quantity of steel (**1**) **NB: if no suitable diagram award up to 3 marks**  	**(6)**

Question Number	Answer	Mark
9(d)*	**KAA = 8 marks** • Definition of indirect tax (a compulsory charge or levy on the expenditure of a good). (**1 mark**) • The tax acts as if there is an increase in costs of production. (**1 mark**) • Indirect tax diagram (**up to 4 marks**) ➢ Original demand and supply curve with equilibrium price and quantity (**1**) ➢ Inward shift of supply curve to S_1 with new equilibrium price and quantity (**1**) ➢ Tax area identified (this must be explicit) (**1**) ➢ Tax areas for consumers and producers identified (**1**) **NB: accept ad valorem tax which shows a pivotal movement of the supply curve.**  **NB: If no relevant diagram award a maximum of 6 out of 8 KAA marks** • Explanation that the tax causes price to rise and output to fall. (**1 mark**) • Explanation of impact on profits or revenue of iron ore producers / share price and dividends implications. (**1+1 marks**) • Investment implications / possible exit from industry (**1+1 marks**)	

	• Job losses / with development e.g. welfare costs to the government. (**1+1 marks**) • The tax will reduce producer surplus / application to diagram. (**1+1 marks**) • Mining firms may be less competitive on international markets / with development e.g. they may relocate. (**1+1 marks**) • Accept any relevant economic effect on consumers and government. (**1+1 marks**). **6 Evaluation marks (2+2+2 or 3+3 or 1+2+3 or any combination up to four points)** • Discussion of price elasticity of demand for iron ore or price elasticity of supply of iron ore / the more price inelastic demand, the less tax burden on iron ore producers. • Discussion of how mining companies may try and make efficiency savings to remain competitive / cut wages or increase productivity. • Discussion of magnitude of tax / with development. • Discussion of short run and long run effects e.g. firms might hold prices and accept lower profits in short run but be forced to raise prices in the long run. Also tax may change in the long run. 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.	**(14)**

Question Number	Answer	Mark
9(e)*	**KAA = 8 marks** (**3+3+2 or 2+2+2+2 or 2+2+2+1+1**) ➢ Definition or understanding of tradable pollution permits (e.g. a cap placed on carbon emissions of firms through the issue of permits which can be purchased and sold). (**1 mark**). **Potential benefits of tradable pollution permits to reduce pollution** (Accept reference to the EU Emissions Trading Scheme) ➢ A market created for buying and selling carbon permits where the price mechanism can internalise external costs / link up with EU in move to create a global emissions trading scheme. (**1+1 marks**) ➢ Award for suitable diagram depicting the internalisation of external costs from production. (**up to 3 marks**) ➢ Incentives for firms to reduce pollution or invest in clean technology / firms can sell excess permits to other firms or bank surplus permits for future years. (**1+1 marks**) ➢ An effective way for the Australian government to achieve its 5% carbon emissions reduction target by 2020 / especially as pollution permits can be reduced over time as part of a plan. (**1+1 marks**) ➢ Australia is one of the world's largest carbon polluters per head of population so the scheme is justified to help reduce global emissions. (**1 mark**) ➢ Government can raise funds by selling some pollution permits or fining firms / revenue can be used to reduce effects of pollution / subsidise cleaner technology / compensate victims. (**1+1+1 marks**)	

	6 Evaluation marks (2+2+2 or 3+3 or 1+2+3 or any combination up to four points) **Candidates may consider costs and disadvantages of tradable pollution permits** ➢ Data reference from Extract 3 of the increase in costs to the mining industry and a danger of less jobs and less funds for investment. ➢ Structural unemployment may be created in mining areas. ➢ Little incentive for firms to reduce pollution since heavy polluters can purchase surplus permits from other firms / rather than invest in expensive clean technology. ➢ Problem that most countries in the world are not part of emissions trading schemes / for example, China, so little impact on reducing global carbon emissions. ➢ The valuation of pollution permits may be too risky to leave to the market / disputes arise over allocation of permits / too many or too few allocated to the market. ➢ It may be difficult for new entrants to the market / development of this e.g. high cost of permits or existing firms not releasing permits for sale. ➢ Other measures might be more effective in reducing carbon emissions e.g. Policy of Direct Action which involves grants to firms / development. ➢ Cost to the government of monitoring and enforcing emissions trading scheme / problem of asymmetric information. ➢ Accept macro arguments: for example, multiplier effect of job losses in mining communities or impact on balance of payments.	**(14)**

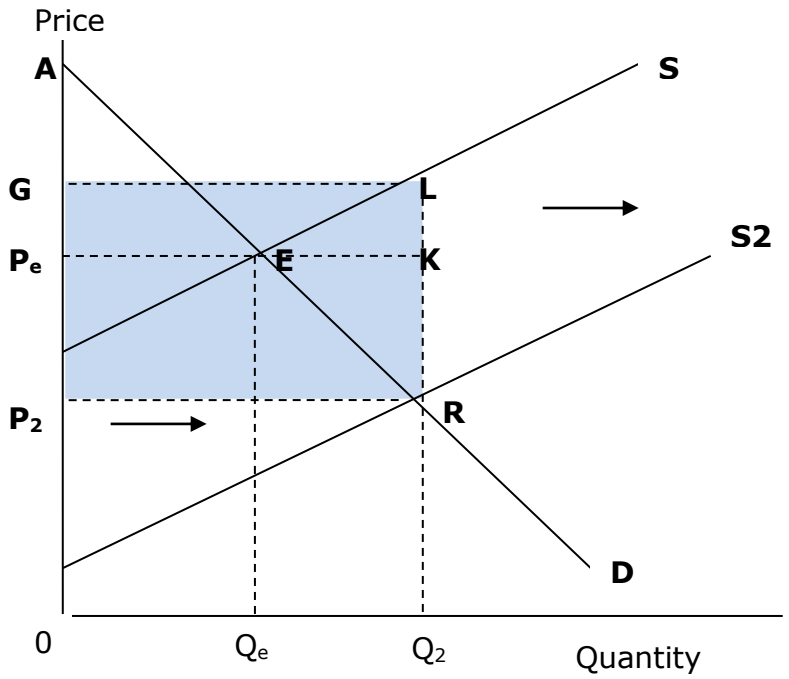
	The quality of written communication will be assessed in this question based on the candidate's ability: ➢ To present an argument and conclude on the basis of that argument. ➢ To organise information clearly and coherently. ➢ To use economics vocabulary appropriately. ➢ To use grammar, spelling and punctuation appropriately.	

Question Number	Answer	Mark
10(a)	**KAA = 4 marks** • Explanation of renewable energy resource: energy that can be used without supply being diminished / a sustainable resource available for future generations. (**1 mark**) • Identification of a renewable energy resource from Extract 1 (wind, wave or tidal power, solar power). (**1 mark**) • Explanation of non-renewable energy resource: use of energy which diminishes the supply available / it is finite in supply and so non-sustainable for future generations. (**1 mark**) • Identification of a non-renewable energy resource from Extract 1 or Figure 1 (fossil fuels such as oil, coal and gas; accept nuclear power). (**1 mark**) • Award for definition of 'resource' (factor input or agent used to produce goods and services). (**1 mark**)	**(4)**

Question Number	Answer	Mark
10(b)	**KAA = 6 marks** Identification of two benefits in the generation of energy from renewable resources (**1+1 marks**) and their development (**2+2 or 3+1 marks**). Be prepared to award for use of economic analysis **Benefits include:** ➢ **Reduction in carbon emissions** / as renewable energy is often regarded as carbon neutral or more environmentally friendly and so can slow down climate change / less air pollution that cause respiratory diseases / increase life expectancy or quality of life. ➢ **Increase the reliability of UK energy supply as less dependent on coal and gas** / less dependent on imports of fossil fuels from countries like Russia / it will help diversify UK energy sources / the long term price of fossil fuels likely to rise as they run out and so renewable energy price may be cheaper in long run. ➢ **Increase use of a sustainable energy source**: / UK has more wind power potential than any other country in Europe / it will replace the energy supply from coal power stations being phased out by 2030 / help UK meet EU renewable energy targets. ➢ **Employment creation:** an extra 70 000 jobs created over the next decade / this will help reduce poverty and inequality in problem areas / it could lead to greater investment into renewable energy. **NB: Accept a mixture of these points**	**(6)**

Question Number	Answer	Mark
10(c)	**KAA = 6 marks** • Definition of the division of labour (production of a good is broken down into different tasks and labour allocated to each task / labour become specialised in particular jobs for the production of wind energy). (**1 mark**). • Application to wind power production: Extract 1 refers to designers, engineers, welders, electricians, truck drivers. (**1 mark**) **Explanation of the benefits of division of labour:** ➢ Increase productivity of labour or increase output per head / may lead to higher earnings for labour. (**1+1 marks**) ➢ Reduction in costs per unit of output or increase in efficiency / which may increase profits. (**1+1 marks**) ➢ More choice of jobs. (**1 mark**) ➢ Diagram showing an increase in supply and reduction in price. (**1 mark**) ➢ Repetition means workers become more skilled / improve quality of their work. (**1+1 marks**) ➢ Faster at their specific jobs due to repetition or an increase in skills / less time taken in moving between jobs. (**1+1 marks**) ➢ More effective use of capital in production / factory space or machinery in constant use so greater efficiency. (**1+1 marks**) **NB: Award a maximum of 4 KAA marks if no reference made to wind power.**	

	• **Evaluation (2+2 marks or 3+1 marks)** **Consideration of disadvantages** ➢ Boredom and monotony of particular work / this could reduce productivity or quality of output / lead to high staff turnover / increase in recruitment costs. ➢ Risk of workers being replaced by machines. ➢ Wind power firms may be vulnerable to dependency upon key types of workers / designers or installation workers. ➢ Time required and cost involved in training workers for specific jobs / immobility of labour e.g. shortage of skilled workers or workers not willing to move to Hull / growth of wind power projects across world mean skilled workers have other choice of jobs. ➢ The benefits of higher productivity may be offset by higher wages.	**(10)**

Question Number	Answer	Mark
10(d)*	**KAA = 8 marks** • Definition of subsidy (government grant to increase production or lower price of a good). (**1 mark**) • The subsidy acts to help reduce production costs. (**1 mark**) • Diagram of subsidies to renewable energy firms (**up to 4 marks**). ➢ Original demand and supply curves with equilibrium price and quantity (**1**) ➢ Shift the supply curve to the right with equilibrium price and quantity (increase) (**1**) ➢ Area of subsidy identified ($GLRP_2$) (this must be explicit) (**1**) ➢ Producer (GLKPe) and consumer (KRP_2Pe) subsidy areas identified (**1**)  **NB: If no suitable diagram provided, award a maximum of 6 KAA marks.**	

Positive effects include:

- Encourage energy firms to supply more renewable energy and reduce supply of non-renewable energy / increase diversity of energy supplies. (**1+1 marks**)

- Reduce pollution associated with non-renewable resources / development of this point e.g. reduces growth in global warming. (**1+1 marks**)

- Increase profits and revenue / employment creation in renewable energy sector. (**1+1 marks**)

- Increase in consumer or producer surplus / annotation of area on diagram or written explanation. (**1+1 marks**)

- Award macro economic benefits. (**up to 2 marks**)

Evaluation 6 marks (2+2+2 or 3+3 or 4+2 or any combination up to four points)

- Opportunity cost of government spending on subsidies to renewable energy firms / money could be spent on healthcare and education.

- Discussion of significance of price elasticity of demand e.g. incidence of subsidy and impact on price and output.

- Discussion of magnitude and time period of subsidies – appear huge at £16.6 billion / development of point e.g. is the subsidy large enough to encourage investment into the renewable energy sector? / uncertainty of energy policy following change of government.

- Discussion of short run and long run e.g. time taken to build wind farms or possible withdrawal of subsidies.

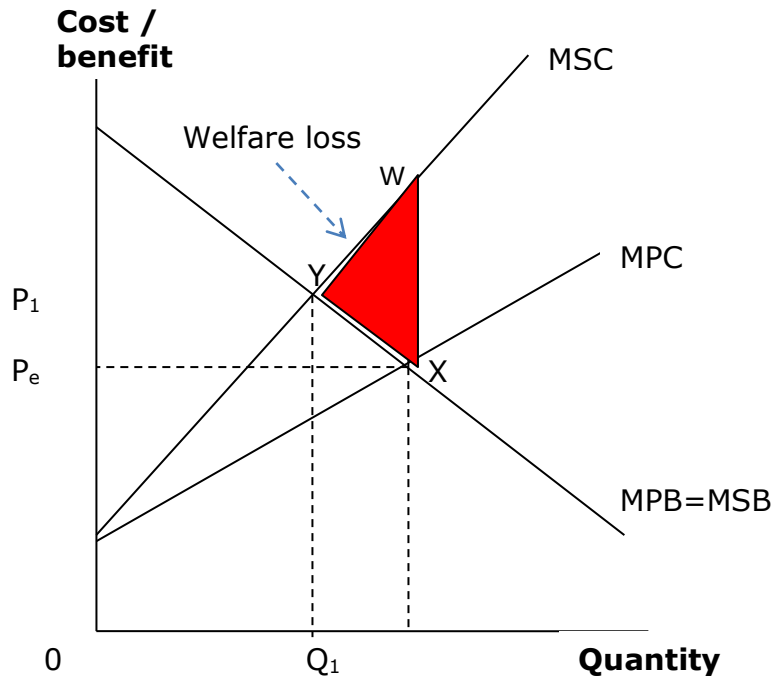
- Extract 2 refers to the lack of competition in awarding of contracts with subsidies / consumers could end up paying higher prices / less choice / less quality of service provision.

(14)

	➢ Firms may become inefficient due to receipt of funds from subsidies / firms may become dependent on government subsidies. ➢ Discussion of reliability of renewable energy / external costs associated with wind farms and solar farms. 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)*	**KAA = 8 marks** • Definition of external costs: Negative third party effects / costs external (outside) a market transaction or exchange / costs the price mechanism fail to take into account / negative spillover effects / difference between social costs and private costs (**1 mark**). • Definition of market failure (where price mechanism leads to an inefficient allocation of resources. (**1 mark**) • Explanation of external costs from generating renewable energy with some development, for example: ➢ Environmental impact – visual eyesore; damage to wildlife such as birds; noise pollution from wind turbines. (**up to 2 marks**) ➢ External costs in construction e.g. noise and road congestion. (**up to 2 marks**) ➢ Falling property values; harder to buy and sell homes near to wind and solar farms. (**up to 2 marks**) ➢ Decrease in tourist visits and consequences for local income, employment and services. (**up to 2 marks**) • Generation of renewable energy involves higher privates costs compared to non-renewable energy / so consumers face higher prices / issue of fuel poverty. (**up to 2 marks**)	

- Diagram (**up to 4 marks**)



  - Original MB and MPC curves with equilibrium position. (**1**)
  - MSC curve (accept a parallel shift of the MSC curve). (**1**)
  - Identification of market equilibrium and socially efficient position. (**1**)
  - Identification of triangle of welfare loss. (**1**)

NB: If no diagram, award a maximum of 6 KAA marks.

6 Evaluation marks (2+2+2 or 3+3 or any combination up to four points)

- Difficulty in quantifying external costs and attaching monetary value / applied to renewable energy.

- Discussion of magnitude of renewable energy projects. 680 onshore and 23 offshore wind farms.

- Long term consequences: society's attitude may change over time / wind farms could become tourist attractions.

- Compensation sometimes paid e.g. local community activities funded by renewable projects.

	➢ There are significant benefits from the generation of renewable energy e.g. employment creation, sustainable energy source, less carbon pollution, more diversity in energy supply, meet EU government targets. (**NB: award up to 4 marks**) 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.	**(14)**

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