PEARSON EDEXCEL A-LEVEL ECONOMICS B · 9EB0

ECONOMICS



MARK SCHEME

1.5 MARKET FAILURE AND GOVERNMENT INTERVENTION

GOVERNMENT INTERVENTION

SCORE	PERCENTAGE
/692	%

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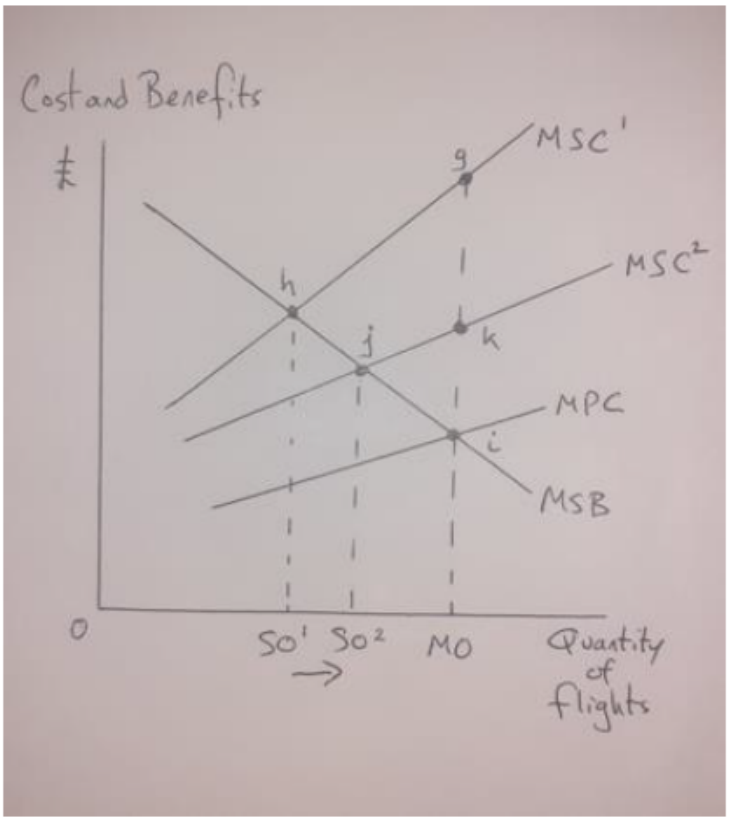
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Mark Scheme

Q1.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge and Analysis:** up to 3 marks for e.g. • Staffing levels fall (1) • Diminishing marginal productivity means for an additional unit of labour the additional increase in productivity declines (1) so the additional cost of hiring more labour (1) needs to be set against the additional productivity gained (1) • As marginal productivity declines/diminishing returns set in (1) marginal cost increases at a faster rate (1) given labour is homogenous (1) • In the short run labour is variable (1) all other factors of production are held constant (1) so an additional unit of labour will result in less additional output (1) • An additional unit of labour results in: marginal product declines (1) average product declines (1) total product increases at a slower rate (1) total cost rises at a faster rate (1) marginal cost increases (1) average cost rises (1) **Application:** up to 2 marks for e.g. • lower marginal productivity of an additional crew member (1) explains why American Airlines are reducing staffing levels (1) • The first cabin crew member serves 50 passengers, the second serves 60 additional passengers, the third serves 30 more, the fourth serves 20 (1+1) • The number of additional meals served will decline per additional crew member (1) as crew members start to get in each other's way (1) • The available space on the plane is fixed (1) and seating/trolley/meals/doors available (1) • Lower cost per passenger (1) cheaper tickets (1)	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Analysis 2, Application 2, Evaluation 2** **Knowledge/understanding:** 2 marks (1+1) e.g. • Social optimum is when MSC = MSB (1) • Social optimum position moves right (1) • Market equilibrium output (e.g. MO) position identified (1) • Downward sloping MSB (1) • MSC = MPC + MEC (1) 	

	Analysis: 1 mark for linked explanation of each identified benefit (1+1) e.g. • Third party effects are lower (1) so external costs are lower/MEC falls (gi to ki) (1) • MSC shifts/skews right (1) showing new social optimum position (MSB=MSC) (1) • Welfare loss falls (1) from ghi to kji (1) **Application:** 2 marks for reference to Extract B e.g. • Thomas Cook airline emissions are lower/switch fuel types/new engines (1) • In 2018 Thomas Cook Group Airline was included in the top 10 of the world's most fuel-efficient airline (1) • Lower insurance bills/clean up bills for companies/households at risk of flood damage/storms (1) loss of cattle/crops due to drought declines (1) • CO_2 emissions per passenger declines (1) quantity of flights increases (1)	

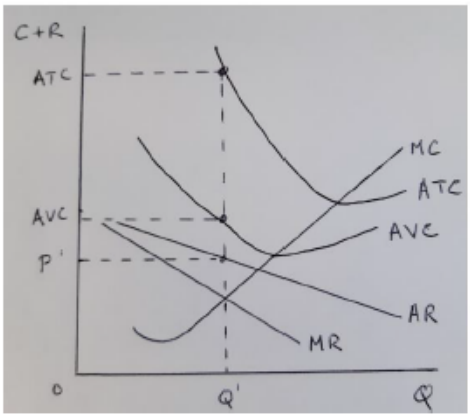
	NB These application points may be annotated on the diagram. **Evaluation:** 2 marks for two evaluative comments, OR 2 marks for identification and linked development of one evaluative comment e.g. • Difficulty in measuring size of negative externality (1) third party effects (1) • CO_2 emissions from travel agents, hotels and holiday activities increase/remain high (1+1) • Computational problems in measuring CO_2 emissions from planes (1) faulty industry data (1)	**(8)**

Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 2** **Case for principal agent problem being significant.** Conflict of interest between the principal (shareholder) and the agent (CEOs/directors/managers) creates problems for Thomas Cook: • Moral hazard – no consequences for the failings of management results in high-risk behaviour • Chief Executive incentivised by £500 000 bonus and £8.5 million salary possibly linked to sales or market share rather than the long-term profitability of Thomas Cook • To increase sales or market share the Chief Executive may have focussed on mergers with other Travel businesses, price wars with competitors or investing in buying new hotels and planes rather than keeping costs low and paying off debts • Chief Executive may have prioritised a greener image by reducing emissions or better pay to avoid pilots striking and sought to satisfice shareholders instead reducing the long-term profitability of Thomas Cook	**(6)**

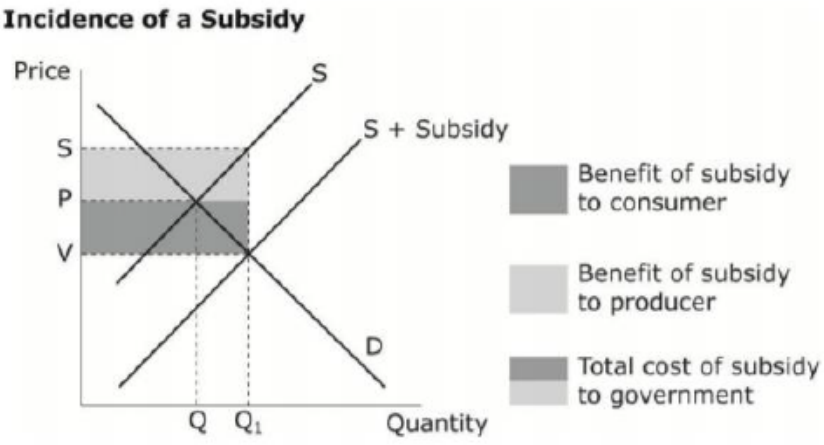
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	3–4	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	5–6	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(c) continued	**Evaluation 4** **Case against 'principal agent problem'** • Employee share-ownership schemes address the problem. £4m of the CEO's £8.5m earning is in shares – so as an employee he is motivated by profit maximisation, bringing him in-line with shareholders. His shares are now worthless • CEO worked "exhaustively" to rescue Thomas Cook and create a long-term strategy. By owning planes and hotels they would have assets and not borrow to rent. In the long-run Thomas Cook could have moved its sales more on-line • Shareholders have lost capital value but the CEO has lost his job, earnings and his reputation • Shareholders can hold the CEO accountable at their AGM, reject pay and bonus awards and place the CEO on a short-term contract to avoid the long-term contract short-term gain problem • Other factors that caused closure – fuel prices, competition.	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Question Number	Indicative content	Mark
(d)	**Knowledge 2, Application 2, Analysis 4** **Case for subsidy:** • Subsidy is financial aid, grant • In long run required more to cover AC • Subsidy may have lowered AC, may be shown as shift on diagram • Benefit of subsidy to producer may cover their AVC in short-run or AC in long-run. • Avoid government rescuing 600 000 travellers • Avoid government paying benefits to up to 21 000 employees and those losing jobs in related industries e.g. hotels • Subsidy may have leveraged help from banks and shareholders • Thomas Cook may have recovered - Package holidays may have come back into fashion – aging population. Recession may have seen a rise in demand for package holidays as an inferior good, YED negative • Diagram may be used, for example:  	

OR



NB a diagram is not required
NB case against subsidy may be seen as KAA and case for as evaluation or vice versa.

(8)

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	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	3–5	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	6–8	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

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Question Number	Indicative content	Mark
(d) continued	**Evaluation 4** **Case against subsidy** Lack of finance • £150 million not enough - £1.5 billion loss. • Needed help from bank loan (zombie-firm), shareholders or another company taking over Thomas Cook. Not willing to help. • £1.5 billion loss in May 2017, already in long-run • Cheaper and more effective to nationalise to rescue employees and suppliers Merger with MyTravel • Diseconomies of scale, LRAC>AR • Lack of synergy • Loss making business	
	Falling demand for Package holidays • AR shifting in • Booking online through competitors rather than Thomas Cook high street outlets • Package holiday inferior good, YED negative. • Climate change – stay at home. Opportunity cost Dependency Government lacks funds- budget deficit Moral hazard No consequences for the failings of management will teach other businesses who get into commercial difficulties that government will pick up the pieces **NB: Case against subsidy may be seen as KAA and case for as evaluation or vice versa.**	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** **Exploiting market power** • Jet2 increases 'price per person' by £36 after Thomas Cook closes (Fig 2) • Thomas Cook, with a 13% market share in 2019, exits the market causing Jet2 to gain market share, possibly close to 25% - gaining monopoly power/duopoly/oligopoly (Fig 1) • Jet2 may be using its monopoly dominance to set a price above the market clearing/allocatively market price • Consumer surplus reduced, producer surplus gained. • With less competition for package holidays, Jet2's PED becomes relatively more price-inelastic resulting in greater price setting powers for package holidays • Jet2 may now be able to set its price at a profit maximising level of £824 rather than possible sales maximisation/revenue pricing/limit pricing/predatory pricing at £788 • Demand for Jet2 holidays increasing as a close substitute to Thomas Cook • Remaining companies colluding, use of game theory. **N.B KAA may be used as EV and vice-versa.**	**(9)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	7–9	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** **Responding to market forces** • Demand for Jet2 holidays increasing as a close substitute to Thomas Cook. This may have been happening before Thomas Cook closure • Thomas Cook exiting the package holiday may have removed a surplus of package holidays • At the price of £788 there is now a shortage of holidays to Sorrento, as shown by excess demand due to cancelled Thomas Cook holidays • Market forces resulting in Jet2 extending their supply at higher prices • As they increase the price to £824 the market may clear	**(6)**

	• Consumers may decide not to buy at higher price - to stay home or become anxious about firms closing and cancelled holidays • Other factors may have caused demand to rise or supply to shift inwards • Market share may not be reallocated to Jet2 • Jet2 is a distant substitute and may not go to same destinations as Thomas Cook • Companies do not collude as fear a whistle-blower and fines 10% or revenue • Rising marginal costs for Jet2 to reduce CO_2 emissions/ buy more fuel to new destinations/ costly take overs. **NB KAA may be used as EV and vice-versa.**	

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments with supporting evidence/reference to context and a partially-developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant chain of reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Q2.

Question Number	Answer	Mark
(a)	**Knowledge 1** **Knowledge** 1 mark for accurate definition e.g. A minimum price is the lowest price that can legally be set (1) The price floor below which cannot be charged (1)	**(1)**

Question Number	Answer	Mark
(b)	**The only correct answer is B** ***A*** *is not correct because it is the loss of consumer surplus resulting from the minimum price* ***C*** *is not correct because it is the gain in producer surplus resulting from the minimum price* ***D*** *is not correct because it is the amount spent by the consumer and the EU*	**(1)**

Question Number	Answer	Mark
(c)	**Knowledge 2** **Knowledge** 1 mark for identifying likely problem and 1 mark for linked development. **One** problem e.g. • At P2 there is a surplus/ excess supply (1) which has to be paid for through higher taxes (1) • This surplus may have to be stored (1) The surplus storage will cost money to maintain the facilities (1) • Opportunity cost of the intervention buying (1) e.g. spending on education (1) • Unintended consequences (1) e.g. firms increase supply (1) • Reference to 'underground markets' • Higher prices for consumers	**(2)**

Q3.

Question Number		Mark
(a)	**Knowledge 2, Application 2, Analysis 1** **Knowledge and Analysis** • Definition of exchange rate: price of one currency in terms of another (1) • Possible reasons: – Reduction in QE by USA **(K):** likely to cause a rise in interest rates in developed economies and less demand for the currencies of emerging economies **(A)** – Slow-down in the Turkish economy **(K):** likely to cause a fall in confidence and a decrease in foreign direct investment and less demand for the currencies of emerging economies **(A)** **Application**: Reference from Figure 1: (2) 14% fall in value of the Turkish lira over the whole period	**(5)**

Question Number	Indicative content	Mark
(b)	**Knowledge 2, Application 2, Analysis 4** • understanding of *inflation:* general increase in the average price level Costs of inflation include: • arbitrary redistribution of income from lenders to borrowers • loss of international competitiveness of Argentine goods • uncertainty causing a fall in investment • industrial unrest: reference to impact of strike by the police • menu costs and shoe leather costs • danger of hyperinflation if the current inflation is not brought under control.	**(8)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	3–5	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	6–8	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(b) continued	**Evaluation 4** • current inflation rate may be a short-term phenomenon only • impact of competitiveness depends on inflation rates of countries that Argentina trades with • Argentine government is taking measures e.g. price controls to reduce the rate of inflation • impact on living standards depends on what is happening to wages	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and/or is critical of the evidence.

Question Number		Mark
(c)	**Knowledge 2, Application 2, Analysis 2, Evaluation 2** **Knowledge and Analysis** • Restrictions on beef exports caused a fall in demand and in the price of beef (**K**). In turn, this made it less profitable to produce beef. (**A**) (2) • Soya production becoming more profitable because of growing demand from China (**K**). Therefore, farmers reallocating resources from beef production to soya production. (**A**) (2) **Application** • 10 million fall in the stock of cattle (over 10 years) to 48 million in 2011. • Exports accounted for 20% of beef production in 2007, but have fallen to just 7% in 2013 (2) **Evaluation** 2 marks for any valid point: • Some farmers may find it difficult to switch production from beef to soya because of the costs involved and/or unsuitability of the land • Farmers might think that government restrictions on beef exports may be short-term so they will not switch from beef to soya.	**(8)**

Question Number	Indicative content	Mark
(d)	**Knowledge 4, Application 4, Analysis 8 Evaluation 9** Microeconomic effects: • supply and demand diagram illustrating the impact of maximum prices: contraction in supply and extension of domestic demand • shortages of products subject to price controls • need for rationing • greater price stability for producers • implications for resource allocation: producers will switch resources to the production of products not covered by price controls. Macroeconomic effects: • falling export revenues from beef sales • negative impact on Argentina's balance of trade • could cause fall in the rate of economic growth • negative implications for Argentina's economic development • fall in the rate of inflation • price controls might act as an incentive for producers to diversify and/or develop manufacturing and tertiary industries. Possible evaluation points include: • impact of price controls depends on how rigorously they are enforced • producers may not reallocate resources to products not subject to price controls if they believe that they will only exist for a short time • impact on the balance of trade may be minimal, e.g. because of the increase in exports of soya • impact on the rate of inflation may be limited to the short-term: once price controls are removed the rate of inflation might increase significantly	**(25)**

Knowledge, application and analysis		
Level	Marks	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays ability to apply knowledge in context but will focus on a small range of elements. Demonstrates understanding by identifying relevant information. Demonstrates knowledge and understanding of terms, concepts, theories and models
Level 2	5–8	Shows ability to apply economic ideas and relate them to economic problems in context. Displays knowledge and understanding of economic principles, concepts and theories to make limited analysis or narrow analysis
Level 3	9–12	Analysis is clear and coherent with evidence well integrated, although may focus on some of the broad elements of the question more than others. Shows ability to apply economic ideas and relate them directly to the broad elements in the question.
Level 4	13–16	Analysis is relevant, clear and coherent with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems covering both microeconomic and macroeconomic effects. A clear understanding of economic principles, concepts, theories and arguments.

Evaluation		
Level	Marks	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of evaluative comments without explanation.
Level 2	4–6	Evaluative comments with limited explanations. Evidence of evaluation of alternative approaches which is generic or unbalanced leading to limited judgements.
Level 3	7–9	Evaluative comments supported by relevant reasoning. Evaluation recognises different viewpoints and can be critical of the evidence provided.

Question Number	Indicative content	Mark
(e)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** Microeconomic effects: • primary producers: export revenues may fall since demand for many primary products is price inelastic • increase in costs for firms reliant on imported raw materials • increase in competitiveness for Argentine exporters of manufactured goods. Macroeconomic effects: • increase in the competitiveness of Argentine's goods and services may lead to an improvement in the current account of the balance of payments • increase in the rate of economic growth • leading to an increase in employment • cost push inflation resulting from increased costs of imported goods • increase in the real burden of foreign debt. Possible evaluation points include: • impact on individual Argentine producers depends on their reliance on imports and/or exports • demand for some products, e.g. soya may not be adversely affected because demand is increasing rapidly in China • inflation is very high so any competitive advantage may be lost quickly. Impact on current account will depend on whether the Marshall-Lerner condition is fulfilled • short-run and long-run effect on the current account may be analysed using the J curve effect • the current account will only improve if the Marshall-Lerner condition is fulfilled, i.e. if the sum of the price elasticity of demands for imports and exports is greater than 1	**(25)**

Knowledge, application and analysis		
Level	Marks	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays ability to apply knowledge in context but will focus on a small range of elements. Demonstrates understanding by identifying relevant information. Demonstrates knowledge and understanding of terms, concepts, theories and models
Level 2	5–8	Shows ability to apply economic ideas and relate them to economic problems in context. Displays knowledge and understanding of economic principles, concepts and theories to make limited analysis or narrow analysis
Level 3	9–12	Analysis is clear and coherent with evidence well integrated, although may focus on some of the broad elements of the question more than others. Shows ability to apply economic ideas and relate them directly to the broad elements in the question.
Level 4	13–16	Analysis is relevant, clear and coherent with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems covering both microeconomic and macroeconomic effects. A clear understanding of economic principles, concepts, theories and arguments.

Evaluation		
Level	Marks	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of evaluative comments without explanation.
Level 2	4–6	Evaluative comments with limited explanations. Evidence of evaluation of alternative approaches which is generic or unbalanced leading to limited judgements.
Level 3	7–9	Evaluative comments supported by relevant reasoning. Evaluation recognises different viewpoints and can be critical of the evidence provided.

Q4.

Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 8, Evaluation 9 • Definition of external costs. • Identification of external costs likely in the energy market. • Explain the reason for government intervention, e.g. overconsumption and the need to reduce it. • Diagram identifying external costs and the need to reduce it – linking to overproduction/deadweight loss: – Indirect taxation – ad valorem and specific – costs rise for firm – reducing supply and quantity/may used funds to compensate third party/increases incentive to move to production of energy with lower external costs. But if demand inelastic just passed on to consumer/little impact on consumer/measurement problem to decide size of tax/may not be reinvested/used to compensate third parties/ avoidance/evasion – Tradable pollution permits – how it works/incentive to reduce pollution to be able to sell them/those that do rewarded/ those that don't have added costs/ But only works if right quantity sold/some may not bother if surplus permits/costs to administer/monitor – Extension of property rights – third party can seek compensation. But only those that can afford to pursue will/no guarantee that you can prove they are the guilty party/energy companies large have expensive and powerful lawyers – Regulation – banning or setting limits on energy production. But expensive to police/measurement problem – what limits to set. • Diagrams may be rewarded where appropriate. **NB For a Level 4 response, candidates must consider two methods in their answer.**	**(25)**

Knowledge, application and analysis		
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	5–8	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two stage chains of reasoning only.
Level 3	9–12	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relates them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	13–16	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Evaluation		
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially–developed chain of reasoning.
Level 3	7–9	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.

Q5.

Question Number	Answer	Mark
(a)	**Knowledge 2, Application 2, Analysis 1** **Knowledge:** 2 marks for identification of how intervention might work e.g. • Raising/lowering interest rates (1) which affects exchange rates/hot money flows (1) • Buying/selling foreign currencies (1) which affects their exchange rate (1) • Buying/selling domestic currencies (1) which affects their exchange rate (1) • Quantitative easing/changing the money supply might be used (1) • Sets a ceiling and floor (1) **Application:** 2 marks for data references e.g. • Use of Figure 1 to show interest rate changes: e.g. central bank rose rates to 6.25 percentage points in 2018 (1) which caused the lira to appreciate 11% (1) lira has lost a third of its value against the dollar in 2018 (1) • Use of text to give example of Turkish government buying and selling: e.g. the country is highly indebted on foreign currency (1) • This might be shown by an exchange rate diagram (1)	

	Analysis: 1 mark for explanation e.g. • Process by which the intervention affects exchange rate/interest rate e.g. the government buys US dollars to decrease the price of Turkish lira (1) by increasing the supply of lira on the forex market (1) or raises interest rate in increase the price of Turkish lira (1) **NB a diagram can be seen as application or analysis, if used in a valid context.**	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 2, Analysis 2, Evaluation 2** **Knowledge/ implicit understanding:** 2 marks (1+1) for each reason and explanation e.g. a lower exchange rate can: • Reduces financial risks • To bring stability/security in the economy • Harms borrowers who have borrowed in foreign currency • Causes inflation as import costs rise • Worsens the terms of trade • Worsens living standards • Short term J-curve effects on current account of the Balance of Payments **Application:** (2 marks: 1+1 or 2) • Turkish inflation 25% • Lira has lost a third of its value of US dollar 2018 (1) • Turkey is highly indebted in foreign currency (1) • Government takes measures against excessive appreciation or depreciation of the Turkish lira to reduce financial stability risks (1) • The financial market faces difficulties in trying to restore *foreign investors'* confidence (1)	

	Analysis: 2 marks (1+1) for linked development of each point e.g. • A weaker currency can lead to cost push inflation as import prices rise • A weaker currency worsens the terms of trade as export prices fall relative to import prices • There will be less investment if there is a loss of foreign investors' confidence/AD shift **Evaluation** (2 marks: two points 1+1 or 2). Points might include: • Inflation is very high (25%) so this should be main reason not to allow a fall in the exchange rate • Inflation is showing signs of reversing so a fall in the exchange rate may be less problematic • Problems caused by inflation might be outweighed by the other benefits such as export-led growth/improved competitiveness • Benefits of weak exchange rate, e.g. exports cheap, • Other benefits of weak currency e.g. stimulus of economy, increased competitiveness, higher employment and FDI	**(8)**

Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 4** **Knowledge/implicit understanding:** Policies identified might include: • Indirect tax/charges • Ban or other regulation • Free bags/nets or other state provision • Fines • Behavioural economics policy **Application:** • Tax or charge on each item. Might be illustrated through a specific tax diagram or similar. • Ban in some parts of Turkey for specific types (carcinogenic black bags). Might be supported by a limit on supply diagram. • Fines for consumers and retailers in some parts of Turkey • Free bags/nets or other state provision in e.g. 20 000 in Corlu near Istanbul • 950 tonnes of plastic waste **Analysis:** • Explanation of process linking the intervention to the reduction in use of bags. • This might be shown through a diagram(s).	**(8)**

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	0	A completely inaccurate response.
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Level 3	6–8	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(c) continued	**Evaluation 4** • Charges work in other countries, e.g. UK • Emerging economies/countries might have more problems facing the cost of interventions e.g. inequality issue, poverty • The problem is much wider than plastic/single use bags, and the interventions will only affect a few on-street purchases • Likely to succeed because it taps into the social conscience of consumers and even a small charge may have a dramatic impact as in the UK • The tax/charge makes up a small proportion of income so many have minimal impact. PED is very inelastic/close to zero • Unintended consequences: e.g. multiple-use/ bags for life often contain more plastic and unless used many times can be more environmentally damaging • First paragraph suggests they are everywhere so given habitual behaviour people may continue to use them despite charges/ tax • opportunity cost of giving away 20 000 bags in a month – is this socially efficient?	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by relevant reasoning and appropriate reference to the context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.

Question Number	Indicative content	Mark
(d)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** 16 marks for KAA, for effects of increased interest rates. Microeconomic effects may include: • Fixed costs to firms will rise. May cause shut down/loss of competitiveness • Fall in consumer demand as consumption expenditure falls - likely reduction in AR for normal goods • Other costs to consumers/firms/a government e.g. increased burden of debt and loan repayments/servicing costs • Fall in investment by firms - reducing dynamic efficiency in the economy as less funds for R&D • Impact on Turkish housing market Macroeconomic effects may include: • Link between higher interest rates and lower investment and lower consumption- reducing AD: inward shift of AD (or slowing outward shift) with multiplier effects with macroeconomic impacts e.g. unemployment • Rise in the value of the lira – worsening of current account of the Balance of Payments – possibly with effects on other countries • Redistribution of income e.g. from borrowers to savers/lenders, from asset holders to renters • Cost of financing public deficit/debt (may refer to opportunity cost) may mean less government spending elsewhere, e.g. limited ability to spend on education **NB for a Level 4 response there must be micro and macro effect (s). Income distribution, investment changes and competitiveness, for example, can be used as either micro or macroeconomics.**	

	9 marks for evaluation – points might include: • Interest rate might not be the most significant cost for firms • Contractionary monetary policies already very tight. Depends on the interest rates in other markets • Inflation has peaked and there are signs that it will fall so the rise in interest rates is not necessary • Trade-off between objectives or prioritisation e.g. lower inflation at the cost of higher unemployment might be shown with critical use of a Phillips Curve • Depends on interest rates in other markets- do we mean lending rates in other countries. • Turkey's private sector is resilient - they may refer to this explaining that shut down is less likely • Impact on housing market will depend on whether people own homes and are mortgaged or whether they rent, or whether mortgage is fixed or variable rate • Magnitude the interest rate change - Figure 1 suggests large increases and therefore significant impact/large changes are unable to have much further effect	**(25)**

Knowledge, application and analysis		
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays ability to apply knowledge in context but will focus on small range of elements. Demonstrates understanding by identifying relevant information. Demonstrates knowledge and understanding of terms, concepts, theories and models.
Level 2	5–8	Shows ability to apply economic ideas and relate them to economic problems in context. Displays knowledge and understanding of economic principles, concepts and theories to make limited analysis or narrow analysis.
Level 3	9–12	Analysis is clear and coherent with evidence well integrated, although may focus on some of the broad elements of the question more than others. Shows ability to apply economic ideas and relate them directly to the broad elements in the question.
Level 4	13–16	Analysis is relevant, clear and coherent with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems covering both microeconomic and macroeconomic effects. A clear understanding of economic principles, concepts, theories and arguments.

Evaluation		
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of evaluative comments without explanation.
Level 2	4–6	Evaluative comments with limited explanations. Evidence of evaluation of alternative approaches which is generic or unbalanced leading to limited judgements.
Level 3	7–9	Evaluative comments supported by relevant reasoning and appropriate reference to the context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.

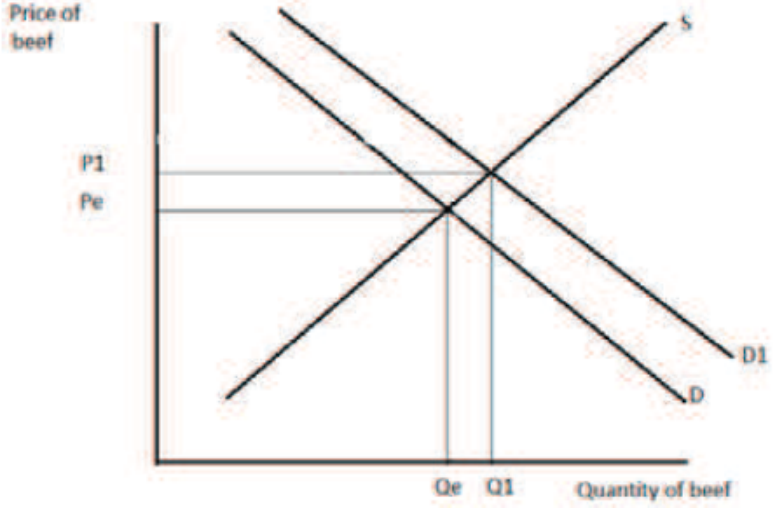
Question Number	Indicative content	Mark
(e)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** 16 marks for KAA, for effects of increased infrastructure spending Microeconomic effects may include: • Wages higher • Improved infrastructure affects firms e.g. businesses' fixed or variable costs fall as transport costs fall • Investment seen to boost business confidence, lead to further investment and spending within firms • External benefits/external costs associated with the project - especially given the size, number of runways and amount of traffic outlined in Extract C. • External economies of scale • Accept answers based on impact on costs and/or revenues if the building occurs in the private sector, with appropriate diagram Macroeconomic effects may include: • Redistribution of incomes • Outward shift of AD/injection (I or G) into circular flow (or further outward shift in AD) with multiplier effects, with macroeconomic impacts e.g. employment and incomes rising • AS shift right with a movement in capacity of the productive economy shown (Keynesian or Classical AS) • Fiscal loosening – effects of increased budget deficit if funded without increase in tax • Effects of a rise in tax, if linked to government decision to raise tax to fund the projects	

	NB for a Level 4 response there must be micro and macro effect (s). Some factors could be seen as micro or macroeconomics, such as a rise in tax, increased FDI, redistribution and confidence. Up to 9 marks for evaluation. Points might include: • Opportunity cost of spending on infrastructure e.g. schools, or higher taxes, • Crowding out – financial or resource • Might be a white elephant project • Depends on relations with EU/other countries as to whether the airport will reach full capacity • Depends on the size of the multiplier effect • Depends on the state of the financial sector • True costs not accounted for - externalities ignored • Large projects require a lot of coordination and getting behind schedule putting lives at risk. • Difficulty in placing value on external benefits and costs associated with the project	**(25)**

Knowledge, application and analysis		
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays ability to apply knowledge in context but will focus on small range of elements. Demonstrates understanding by identifying relevant information. Demonstrates knowledge and understanding of terms, concepts, theories and models.
Level 2	5–8	Shows ability to apply economic ideas and relate them to economic problems in context. Displays knowledge and understanding of economic principles, concepts and theories to make limited analysis or narrow analysis.
Level 3	9–12	Analysis is clear and coherent with evidence well integrated, although may focus on some of the broad elements of the question more than others. Shows ability to apply economic ideas and relate them directly to the broad elements in the question.
Level 4	13–16	Analysis is relevant, clear and coherent with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems covering both microeconomic and macroeconomic effects. A clear understanding of economic principles, concepts, theories and arguments.

Evaluation		
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of evaluative comments without explanation.
Level 2	4–6	Evaluative comments with limited explanations. Evidence of evaluation of alternative approaches which is generic or unbalanced leading to limited judgements.
Level 3	7–9	Evaluative comments supported by relevant reasoning and appropriate reference to the context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.

Q6.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge** 1 mark for original supply, demand and equilibrium. **Application** 1 mark for using source data (1) and 1 mark for link to change in demand (1), e.g. • increased meat sourced from UK, 81% to 83%/increased sales to emerging markets (1) leading to increased demand (1). **Analysis** • Diagram – showing shift in demand (1) and new equilibrium (1).  	(5)

Question Number	Indicative content	Mark
(b)	**Knowledge 2, Application 2, Analysis 2** • Define cross elasticity of demand. • Identify lamb as substitute. • XED – positive – as price of beef rises the demand for lamb will rise. • Diagram to show increased demand for lamb. • Price and quantity both rise for this good. • Likely to lead to increased revenue. • Increased producer surplus. • Increased consumer surplus.	**(6)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no links between causes and consequences.
Level 2	3–4	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relate them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	5–6	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(b) continued	**Evaluation 4** • Magnitude – depends on amount of price adjustment. • Short run little change – people do not adjust to price changes straight away/long run may take time for people to substitute. • Closeness of substitutes – inelastic supply means little impact/elastic larger impact.	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(c)	**Application 2, Knowledge 2, Analysis 2** **Application** 2 marks for, e.g. • desire for protein/dairy – 30–50m litres (1) • increased demand (1). **Knowledge/understanding** e.g, any two from: • higher prices (1) • higher output (1) • revenue rise (1). **Analysis** e.g, any two from: • increased profits/producer surplus identified/shown in diagram (1) • investment required for machinery and logistics – getting products to China (1) • firms will export more products (1).	**(6)**

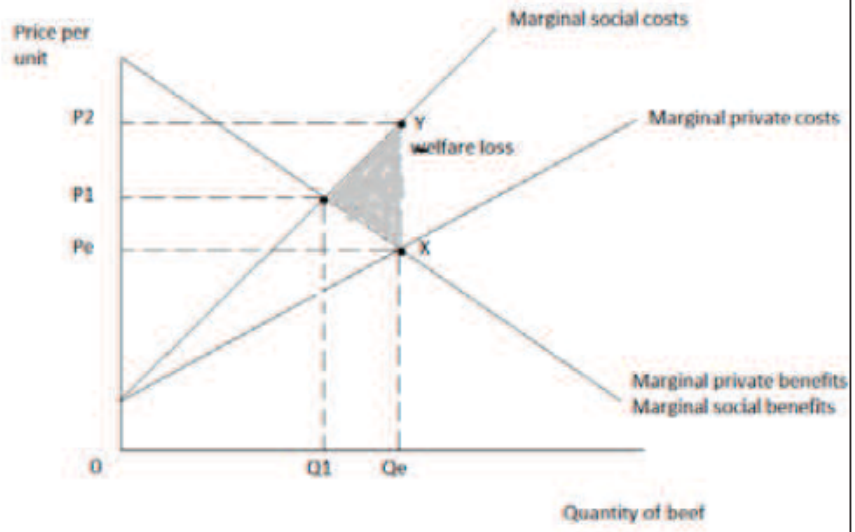
Question Number	Answer	Mark
(d)	**Knowledge 2, Application 2** 2 marks for correct use of formula (1+1). 2 marks for correct answer (1+1), e.g: • 2012 – 554/700 (1) x 100 = 79% (1) • 2013 – 562/830 (1) x 100 = 68% (1) NB if the answer given is 79% award 2 marks; if the answer given is 68% award 2 marks.	**(4)**

Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** • Define subsidy. • Application – £554m – 79%/69% of income. Reasons for a subsidy include: • lowers production costs • increases supply (on diagram or written) • lowers price (on diagram or written) • increases quantity (on diagram or written) • more accessible to poor (low price) • higher meat and milk consumption • vital rural economy – protects incomes/jobs • maintains/guarantees food supply • trickle-down effect • food industry relies on them.	**(9)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	7–9	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** Reasons against a subsidy include: • 79%/ 69% of income is subsidy • reliant on subsidy • X – inefficient • should be allowed to get out of market and make room for someone else • cost to government – opportunity cost.	**(6)**

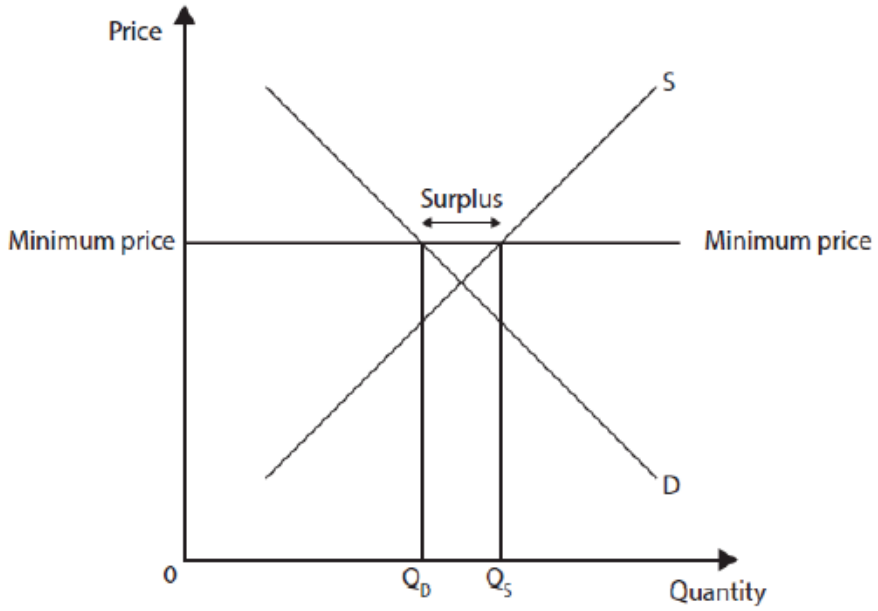
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant chain of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Indicative content	Mark
(f)	**Knowledge 4, Application 4, Analysis 6** • Define external costs. • Diagram accurately drawn – with MPC, MSB, MPB and MSC, welfare loss triangle.  • It takes 1,800 gallons of water to make a single pound of grain-fed beef. • Thirty per cent of the world's land is used to raise livestock. • Cows as major producers of methane gas. • These animals produce more climate-changing greenhouse gases than 22 million cars a year. • Manure, tons of fertilisers and toxic contaminants used in slaughterhouses.	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two-stage chain of reasoning only.
Level 3	7–10	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(f) continued	**Evaluation 6** • Magnitude – depends on how much additional meat. • Measurement difficult – putting a value on external costs. • Increased demand – higher revenues. • Benefits of increased consumption – export income.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Question Number	Indicative content	Mark
(g)	**Knowledge 4, Application 4, Analysis 6** • Diagram showing minimum price above market equilibrium.  • Define minimum price. • Reasons for minimum price – protect incomes of producers. • Raise price of beef/ cause excess supply. • Contraction of demand/ extension supply. • Government may have to buy excess supply • Reduce consumption of meat – reduce obesity. • Link to NHS.	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two-stage chains of reasoning only.
Level 3	7–10	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(g) continued	**Evaluation 6** • Anti competition. • Magnitude of price changes – increase then may put businesses out of business – job losses. • Delays – time lag before it starts. • Encourage smuggling – if minimum price. • Imports. • Magnitude – depends on size of minimum/maximum price. • Elasticity of demand– if inelastic little change. • Time lag – people will not change behaviour immediately.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Q7.

Question Number	Answer	Mark
	Knowledge 1, Application 2, Analysis 2 **Knowledge/understanding** 1 mark for e.g: • definition or formula or diagram of price elasticity of supply. Price elasticity of supply (PES) measures the responsiveness of quantity supplied to a change in price. PES can be calculated using the following formula: PES= percentage change in Quantity Supplied (%Δ in Qs) / percentage change in Price (%Δ in P) **Application** Linked application focussed on new housing stock (1+1) e.g. • Price elasticity of supply of 1 means unitary elasticity; PES>1 means elastic; PES <1 means inelastic (1) • 1 mark for identifying Supply elasticities in the USA or Finland are at or above unity (1) and 1 mark for identifying a country with particularly low elasticities of supply e.g. the Netherlands or the UK (1). • Candidates who compare the elasticities of one country where supply is elastic and one country where supply is inelastic: e.g. USA +2.0 (1) and UK +0.4 (1). • Supply is particularly unresponsive to prices in the Netherlands, more than ten times less responsive than in the USA (1+1). • A numerical illustration of the effects of price changes in different countries (1+1)	
	Analysis Linked analysis (1+1) e.g. • Above unity PES implying that in response to a demand shock housing output will increase proportionally more than prices (1) and below unity where housing supply is relatively unresponsive (1). • Explaining how it is easier to build new houses in the US compared to the UK (1) where it is more difficult to build new houses e.g. due to planning restrictions in UK (1). • Allow other reasons/factors that affect PES e.g. land availability, technology or time(1+1).	**(5)**

Question Number	Indicative content	Mark
	Knowledge 2, Application 2, Analysis 2 • Help to Buy is a subsidy making home ownership more attractive • Cross (price) elasticity of demand (XED) measures the responsiveness of quantity demanded for one good to a change in the price of another good. • Identify home ownership and rented properties as substitutes • Likely positive cross elasticity of demand – Help to Buy scheme may result in decrease demand in rental sector • Deposit size 5% rather than 20% - demand increases • Demand for rental properties decrease – diagram showing shift inwards • Price and quantity of rental properties to fall • Consumer and Producer surplus in rented sector declines • Alternative views valid e.g. Help to Buy may increase house prices and therefore increase demand for rented accommodation from those not eligible for Help to Buy. Help to Buy shifted demand for private houses to the right (increase) and that, ceteris paribus, this would shift demand for rented accommodation to the left (reduction).	**(6)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1-2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no links between causes and consequences
Level 2	3-4	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relate them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	5-6	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

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Question Number	Indicative content	Mark
continued	**Evaluation 4** • Scale – "modest" uptake of the Help to Buy scheme • Time-scheme due to end in 2017 • Scope – more likely to affect "lower end" of property market. • Closeness of substitutes – home ownership is purchasing an asset renting is a cost of living. • Scheme only affects first time buyers • PES – planning restrictions • Regional variations • Other factors more significant e.g. income • Candidates may refer to long-term investment in private rented sector as buy-to-let increasing demand for home ownership.	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1-2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3-4	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
	Knowledge 2, Application 2, Analysis 2 **Knowledge** 2 marks for e.g. • Define producer surplus e.g. a measure of producer welfare or the difference between what producers are willing and able to supply a good for and the price they actually receive • Diagram to show the original demand and supply curve and equilibrium • Identify the original producer surplus **Analysis** 2 marks for e.g. • Diagram illustrates increased producer surplus (1) resulting from demand shifting out (1) **Application** 2 marks for e.g. • Explain that there is an increase in prices (1) as demand for houses rises (1) • Explain that there is an extension in supply or a rise in the housing availability • House builders will make a larger surplus (profit) • Producer surplus is likely to be only for new housing. With the existing housing stock, any increase in house prices would not be referred to as increasing producer surplus as the seller still has to find a home to live in. • Effect of PED/PES on size of producer surplus	**(6)**

Question Number	Answer	Mark
	Knowledge 2, Application 2 • 1 mark for identifying the formula e.g. (new-original)/original*100 (1 mark) • 1 mark for locating the data 373 (Q1 2015) minus 300 (Q1 2009) • 1 mark for performing calculation • 1 mark for substituting figures correctly e.g. (373 – 300)/300 * 100= 24%. Accept 23 – 25% NB If the answer given is 24% or 24 award 4 marks. Do not award inaccurate answers such as minus 24% as 4 marks but credit any accurate working.	**(4)**

Question Number	Indicative content	Mark
	Knowledge 3, Application 3, Analysis 3 • Prices perform a **signalling function** – they adjust to demonstrate where resources are required. • Prices act as an **incentive function** – for consumers and/or suppliers • Prices perform a **rationing function**. • House price index fell e.g. in 2007-09 from 360 to 300 (-17%). House price index increased e.g. 2009-2014 from 300 to 375 (+25%). • Use of selected PES in Figure 1 • Diagram to explain price mechanism e.g. removal of shortages and surpluses • Allow use of economic thinkers/theories e.g. Smith's invisible hand/addressing the economic problem, Hayek's communication network.	**(9)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1-3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4-6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance
Level 3	7-9	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning

Question Number	Indicative content	Mark
continued	**Evaluation 6** • Signals ignore negative externalities of building on green belt or higher risk of flooding. • Incentives lack perfect information or exhibit asymmetric information • Housing is an asset – speculative demand will prevent shortages from being eradicated – a "runaway train" Extract A. • Housing price mechanism fails to meet demand for affordable housing. • Regional inconsistencies – supply shifting inwards in parts of country or demand not increasing • Impact of recession/housing recovery fragile - prices volatile or continuously over-priced. • Long run/ short run distinction. • Lack of land/planning restrictions means PES remains inelastic. • Allow other government interventions/failure.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1-2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3-4	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5-6	Evaluative comments supported by relevant chain of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

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Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 6 • Effects include changing property prices, rental market, affordability, shifts in demand and supply, welfare changes, environmental impact, cost to firms, cost to government, or impact on other markets. • Methods of intervention – e.g. subsidies, taxation, provision of information, regulation, direct provision of housing, flood defences, Help to Buy and rent controls. One type of intervention is sufficient as long as considering range of micro-effects. • Purpose of Government intervention to correct market failure – housing shortages and affordability. Possibility of further market and government failure. • Use of Figure 1 to indicate UK's PES may increase. • Use of Extract B: to increase property supply "making new homes available more quickly". • Candidates may consider macro issues in a micro context if part of a chain of reasoning that identifies micro impact e.g. provides incentive to build more housing increases employment. NB KAA can be positive or negative effects.	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1-3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4-6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two-stage chain of reasoning only.
Level 3	7-10	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance
Level 4	11-14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
continued	**Evaluation 6** • Magnitude – extent of government intervention. • Measurement difficulty • Short run, long run issues. • Information gaps. • Unintended consequences - mortgage help may become ineffective in catching a 'runaway train' • Impact on different interest groups. • Distortion of price signals. • Opportunity cost to Government. • Environmental impact e.g. flooding NB EV can be positive or negative effects.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1-2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3-4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning
Level 3	5-6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement

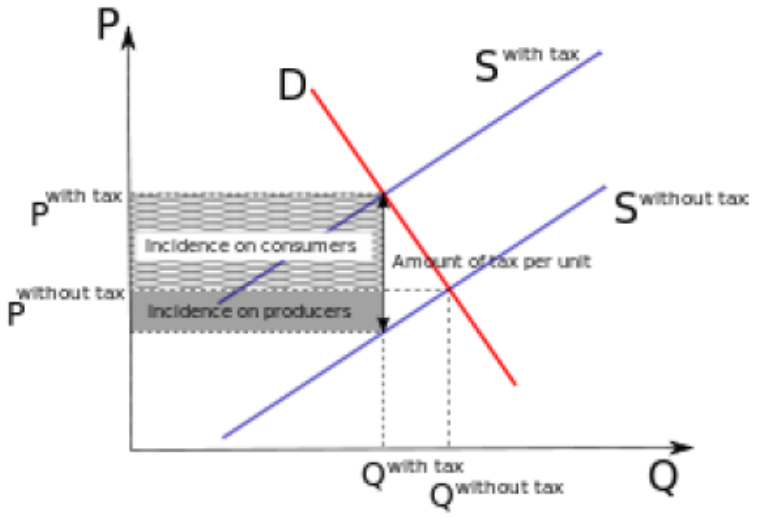
Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 6 • Candidates may illustrate through use of appropriate diagram. • Public goods: non excludable and non rivalrous, e.g. flood defence schemes. • Failure of free market – free rider problem. • Externalities – positive or negative, e.g. housing may create these. • Information gaps: markets may have asymmetric information, e.g. insurance companies having incomplete information on risk of flooding. • Candidates may consider other types of government provision.	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1-3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4-6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two-stage chain of reasoning only.
Level 3	7-10	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance
Level 4	11-14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
continued	**Evaluation 6** • Unintended consequences. • Magnitude • Government failure, e.g. flood defences. • Opportunity cost of government provision. • Ineffectiveness of government provision, e.g. climate change – better to abandon areas, • Information gaps. • Non-beneficiaries pay. • Anti-competitive.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1-2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3-4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning
Level 3	5-6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement

Q8.

Question Number	Answer	Mark
(a)	**Knowledge 2, Application 2** **Knowledge** - Correct drawing of a demand and supply diagram annotated to show a parallel left (1) shift in the supply curve (1) **Application** - consumer tax incidence shown (1) - producer tax incidence shown (1)  **NB: Award application mark for correctly identifying on diagram amount of tax per litre is set at 58 pence per litre. PED does not have to be price inelastic.**	**(4)**

Question Number	Answer	Mark
(b)	**Analysis 1** **The only correct answer is A** ***B*** *is not correct because both consumer surplus and producer surplus decrease* ***C*** *is not correct because producer surplus decreases* ***D*** *is not correct because consumer surplus decreases*	**(1)**

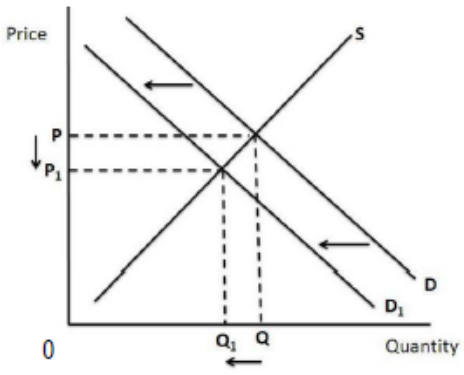
Q9.

Question Number	Answer	Mark
(a)	**Knowledge 1** **Knowledge/understanding** 1 mark for definition, e.g. This occurs when government intervention in the economy causes a net welfare loss/decline in economic welfare.	**(1)**

Question Number	Answer	Mark
(b)	**Knowledge 2** **Knowledge** 1 mark for reason and 1 for linked development Possible answers include: • Positive externalities (1) resulting from people using railways rather than roads (1) • Risk/imperfect information (1) if the project is undertaken by the private sector it may be less likely to happen (1)	**(2)**

Question Number	Answer	Mark
(c)	**The only correct answer is A** ***B*** *is not correct because this would cause the demand for rail travel to shift to the left* ***C*** *is not correct because this would cause the supply curve to shift to the right* ***D*** *is not correct because this would cause the supply curve to shift to the right*	**(1)**

Q10.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge** 1 mark for definition of revenue or may identify clearly in diagram (1) **Application** 1 mark for using source data or linking ban to reduced consumption (1) and 1 mark for diagrammatic link to change in revenue (1), e.g. • "can reduce tobacco consumption" (1) leading to decreased revenue as shown in diagram (1) **Analysis** Diagram showing demand shifts left or becomes less price inelastic (1) and new equilibrium (1)  	**(5)**

Question Number	Indicative content	Mark
(b)	**Knowledge 2, Application 2, Analysis 2** • Application – price of e-cigarettes per nicotine cheaper • Data on PED suggests some rational response to price change e.g. 10% rise causes 4% fall in demand (Extract A) Reasons rational • Smokers computationally aware of financial gains of switching • Smokers informed of private health gains (Extract B Paragraph 2) • Reducing health external costs e.g. passive smoking(Extract A L15) • Smokers aware that regulations will increasingly make it difficult for them to gain utility of nicotine consumption through tobacco smoking **NB Reasons for/against being rational may be presented as either KAA or EV**	**(6)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	3–4	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	5–6	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(b) continued	**Evaluation 4** Reasons against being rational • Smokers lack information and computational skills to accurately assess full costs and benefits of switching. May underestimate long-term gains of switching (bounded rationality) • Information overload • Both products contain nicotine which is addictive and habit forming. • If e-cigarettes were not available they may quit smoking altogether • Switch may be only short-term (impulse buying) • E-cigarettes complements tobacco smoking resulting in an overall increase in nicotine consumption • PED for tobacco remains lower than e-cigarettes so a price rise in the latter may result in a switch back • Peer pressure (herd mentality) pushing smokers to make the switch	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(c)	**Knowledge 2, Application 2, Analysis 2** **Knowledge/understanding** 1 mark each for any two of the following: • definition or formula of cross elasticity of demand (1) • tobacco cigarettes and e-cigarettes have a positive cross elasticity of demand (1) • understanding of substitute relationship e.g. similar products (1) **Application** 1 mark each for any two of the following: • e-cigarettes seen as less harmful so become more attractive compared to tobacco cigarettes (1) • tougher regulations and growing health awareness on tobacco (1) • they are substitutes because they offer nicotine (1) • applying cigarettes to diagram showing impact on e-cigarettes (1+1) • relative price differences e.g. Figure 1 or tax rises on tobacco (1) • use of numerical example e.g. a 10% rise in the price of tobacco cigarettes results in a less than 10% rise in demand for e-cigarettes **Analysis** Up to 2 marks for any one of the following in linked development OR two limited examples of analysis (1+1): • the increase in the price of traditional cigarettes is resulting in the change in quantity demanded of e-cigarettes increasing • consideration of whether distant or close substitutes • diagram showing relationship between price of one of the product and demand for the other • magnitude/time	**(6)**

Question Number	Answer	Mark
(d)	**Knowledge 2, Application 2** 2 marks for each correct answer, e.g. • High-income countries = -4% / +10% (1) =- 0.4 (2) or 0.4 (2) • Low-middle-income countries = -5% / +10% (1) = -0.5 (2) or 0.5 (2) **NB Award 1 mark for a correct formula as an alternative for substituting correct figures on up to one occasion.**	**(4)**

Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** • Identification of determinants of price elasticity of demand • Application – PED tobacco cigarettes -0.35; PED e-cigarettes -1.9. Reasons why tobacco cigarettes being relatively price-inelastic, e-cigarettes relatively price-elastic e.g.: • habitual consumption • tobacco broadly defined • proportion of income spent on tobacco cigarettes lower than switching cost of buying reusable e-cigarette kit • number of close substitutes • tobacco addictive necessity, e-cigarettes luxury (not yet addicted to). **NB to access Level 3 candidates need to consider tobacco and e cigarettes.**	**(9)**

"Assess" was used as the command word for this question instead of "Discuss". In order to meet the expectations set out in the sample material the 10 mark level descriptors have been mapped on to the 15 mark levels as below on this one occasion. See Appendix 1 for full details.

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	4-6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	7-9	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** • significance of determinant • e-cigarettes habit forming • tobacco cigarettes narrowly defined • proportion of income spent on tobacco cigarettes is rising • becoming closer substitutes • tobacco addiction waning as lost glamour and health warnings, e-cigarettes nicotine addiction. • longer term response to rising tobacco prices	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Indicative content	Mark
(f)	**Knowledge 4, Application 4, Analysis 6** Functions of the price mechanism to allocate resources: • rationing • incentive • signalling Market diagrams for tobacco and e-cigarettes, making use of supply and demand analysis. * Consumers with knowledge of the potential harm of cigarette smoking may quit smoking. * Smokers will maximise their private utility * Consumers will decide what is in their best interests * Reduction in smoking will happen automatically, without government intervention, as e-cigarettes become popular.	

	Candidates may refer to Adam Smith Consumers free to pursue own self interest Profit incentive will mean firms will want their consumers to live long – so move out of tobacco and into e-cigarette market. Without government regulations e-cigarettes market will be easier for new firms to enter thus improving competition. Competition between e-cigarette manufacturers to maximise profits will drive health improvements and lower costs making them more price competitive. Candidates may refer to Friedrich Hayek Resource allocation from tobacco to e-cigarettes will be brought about by market forces, which will be far superior to any state planning system. Individuals do not have perfect information on cigarettes but have the best knowledge of their own situation. The price mechanism acts as a communication network, markets are self-correcting. Government lacks sufficient information about everything happening in the cigarettes market to be able to make informed decisions.	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two stage chains of reasoning only.
Level 3	7–10	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

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Question Number	Indicative content	Mark
(f) continued	**Evaluation 6** Failings of the price mechanism • Information gaps • Asymmetric information • Externalities • Peer pressure ignores utility • Habit forming distorts utility Possible different disadvantages or approaches : * While consumers may maximise their private utility MSC > MSB, with explanation. e.g. passive smoking/health care costs * Without government intervention the oligopolistic/monopolistic power of cigarette firms, in the form of advertising and propaganda, will go unchecked Candidates may refer to Karl Marx Consumers exploited in past by misinformation on tobacco and due to being addictive they become dependent. Competition and the need to profit maximise will mean firms cut costs risking consumers health and increase prices thus reducing consumer surplus. Nature of free market is for powerful monopolies to emerge that can further exploit consumers.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

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Question Number	Indicative content	Mark
(g)	**Knowledge 4, Application 4, Analysis 6** Positive/negative effects of government intervention on tobacco cigarettes and or e-cigarettes with reference to market failure and using diagrams in various contexts: • Indirect taxation (ad valorem and specific) • Subsidies for tobacco replacements • Minimum cigarette price • Provision of information e.g. public health campaign • Regulation e.g. banning smoking in public places or advertising. • Direct provision – nicotine patches and e-cigarettes on NHS prescription Diagrams may be used to illustrate the above.	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two stage chains of reasoning only.
Level 3	7–10	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(g) continued	**Evaluation 6** Negative or unsuccessful impact of the intervention methods. Understanding of government failure as intervention that results in a net welfare loss – tobacco cigarette tax revenue exceeding tobacco related NHS expenditure. Causes of government failure: • Distortion of price signals – harm reduction instead of prevention, consuming e-cigarettes rather than quitting • Unintended consequences – e-cigarettes draw in new users acting as a gateway to smoking; regulating e-cigarettes protect tobacco from competition; tobacco smuggling • Excessive administrative costs – slow down e-cigarette innovation • Information gaps – little research on long term effects of e-cigarettes • Ineffective as PED <1; diminishing returns of tax and regulations. Price inelastic demand diagram. Other evaluation approaches include: • Consideration of the extent of government intervention e.g. could it be more regulated • Free market approach might be more effective • Depends on the country being considered • Short run and long run	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Appendix 1

Part (e) directed candidates to "Assess" for 15 marks. In order to be in line with the support materials for this specification, this question should instead have directed candidates to "Discuss" for 15 marks. In order to ensure that all candidates received the fairest possible outcome, examiners were briefed on a levels-based marking structure for both command words. The body of the mark scheme includes the levels structure for the "Assess" command word as written in the paper. The levels structure that examiners considered for the "Discuss" command

word is included below.

Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** • Identification of determinants of price elasticity of demand • Application – PED tobacco cigarettes -0.35; PED e-cigarettes -1.9. Reasons why tobacco cigarettes being relatively price-inelastic, e-cigarettes relatively price-elastic e.g.: • habitual consumption • tobacco broadly defined • proportion of income spent on tobacco cigarettes lower than switching cost of buying reusable e-cigarette kit • number of close substitutes • tobacco addictive necessity, e-cigarettes luxury (not yet addicted to). NB to access Level 3 candidates need to consider tobacco and e cigarettes.	**(9)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	7–9	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** • significance of determinant • e-cigarettes habit forming • tobacco cigarettes narrowly defined • proportion of income spent on tobacco cigarettes is rising • becoming closer substitutes • tobacco addiction waning as lost glamour and health warnings, e-cigarettes nicotine addiction. • longer term response to rising tobacco prices	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant chain of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Mark Scheme

Q1.

Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 8, **Subsidies** • Definition of subsidies. • Link subsidies to effect on lowering firms costs • Increasing supply • Reducing price and increasing quantity • Increasing consumer and producer surplus • Link to affordability- food essential for meeting basic needs • Helps with farmers income and encourages investment **Minimum pricing** • Definition of minimum pricing • Explain that when above market price this will ○ Reduce quantity demanded ○ Increase quantity supplied • Guarantees food production • Protects farmer incomes • Encourages more investment- less risk NB For a Level 4 response, candidates must consider both methods in their answer.	**(16)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	5–8	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two stage chains of reasoning only.
Level 3	9–12	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relates them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	13–16	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
continued	**Evaluation 9** **Evaluation** Evaluation of subsides: • Government spending • Opportunity cost • Inefficient allocation of resources • Farmers may become complacent- reliant on subsidies Evaluation of minimum price: • Increase price consumers have to pay • Government may have to buy excess supply/ surplus • Government may have to store or maintain this • May incentivise over production as guaranteed price • measurement problem to decide size of subsidy/ minimum price • prioritisation of one policy over another with development • magnitude- depends on where set • Diagrams should be rewarded where appropriate.	**(9)**

Evaluation		
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially–developed chain of reasoning.
Level 3	7–9	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.

Q2.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 1, Analysis 1** **Knowledge/Understanding** 1 mark for identifying/defining excess demand, shortage **Application** 1 mark for application to university education, e.g. • Diagram indicates cut in tuition fees from £9 000 to £6 000 (1) • Universities lack cash so close down departments (1) • University now more affordable for applicants (1) **Analysis** 1 mark for linked development, e.g. • Lower maximum price illustrated or explained, price below market equilibrium (1) • Extension in demand, movement forwards along demand curve if drawn (1) • Contraction in supply of university places, movement backwards along supply curve (1)	**(3)**

Question Number	Answer	Mark
(b)	A	**(1)**

Q3.

Question Number	Answer	Mark
(a)	**Knowledge 2, Application 1, Analysis 1** **Knowledge and Application** 1 mark for understanding of pollution permits (1) 1 mark for appropriate linkage to industry/market/firms (1) 1 mark for how reducing permits reduce pollution (1) Award use of diagrams, for example: shifts the supply of permits inwards (1) which will push up the price per permit (1) OR Negative externality reduced **Analysis:** 1 mark for linked development of market incentives/government revenue e.g. Reducing pollution/Increase in price of permits (1).	**(4)**

Question Number	Answer	Mark
(b)	**Analysis 1** **The only correct answer is B** ***A*** *is not correct because regulation may cause the distortion of price signals as a problem* ***C*** *is not correct because regulation may result in the problem of information gaps* ***D*** *is not correct as regulation may result in the problem of excessive administrative costs*	**(1)**

Q4.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge** 1 mark for understanding/formula of price elasticity of demand i.e. the responsiveness of quantity demanded to a change in price **Application** 2 marks for using data e.g. • reference to fees e.g. £9 250 (1) or PED e.g. -0.5 (1) • 825% increase in fees (2) **Analysis** PED is inelastic (1) so government and universities know that students are prepared to accept higher fees (1) Students are not price sensitive (1) so the level of fees is perhaps less important than other issues e.g. fairness of fees for different courses (1)	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 2, Analysis 2** • The statement is concerning because people from poorer backgrounds are less likely to apply to university in the first place (Extract A, Figure 3), so when they do go and drop out we are failing to maximise the use of scarce resources • Universities are trying to increase accessibility but failing to keep poorer students. This means that graduates are increasingly likely to be from wealthier families and poorer student are leaving because of concern over high levels of debt • Would this happen if England had low or no tuition fees like Germany? • Candidates may draw a PPF showing the country operating within the frontier because as a nation we are not making the most of our labour force • Opportunity cost. Government and universities spending money/resources that could have been spent elsewhere	**(6)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	**1–2**	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	**3–4**	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	**5–6**	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Answer	Mark
(b) continued	**Evaluation 4** • Extract A refers to the fact that 'Students from all backgrounds are more likely to go to university than ever before' • Poorer students are continuing to attend university and various schemes exist to support them • Questioning the extent of the effect over time. How significant is this? Are tuition fees a significant contributor to drop-out rates? • Judgement should focus on how important this effect is NB KAA can be treated as Evaluation and vice versa	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(c)	**Knowledge 2, Application 2, Analysis 2** **Knowledge/understanding** • Identification of one external and one private benefit: tax revenue (external); higher earnings (private) (1+1) **Application** 2 marks for, e.g. • 'the government will benefit greatly from additional tax revenues' (1) • 'the rest will be in the form of their extra spending power' (1) **Analysis** Linked development of why the education specifically benefits producers e.g. higher productivity enable firms to achieve lower costs and, therefore, lower prices (1+1) **Award up to 3 marks for each benefit**	**(6)**

Question Number	Answer	Mark
(d)	**Knowledge 2, Application 2** Formula for percentage calculation (new-old)/old x 100. (1) (102357 – 45418)/45418 x 100 (1+1) = Accept any figure between 125 and 126 **NB Award 4 marks for a correct answer of 125%. Award up to 3 marks for correct working.**	**(4)**

Question Number	Answer	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** • The top five subjects generate earnings significantly above the average when compared to non-graduates whereas the bottom five reduce earning potential. Charging different fees would allow universities to maximise their own earning potential • Students would pay because they can clearly see that the benefits outweigh the costs • Some subjects cost more to staff, so they should cost more, allowing less expensive degrees to be reduced in price • Provide improved courses / give students better educational experience/attract more domestic students • Provide more funds to look after disadvantaged students • Improved courses will attract overseas students • Allow universities to cover the true cost of some courses. Examine variable fees in terms of allocation of resources • Discuss the consumer pays principle. Consumers i.e. students who benefit from university education (premium of £10 000) should pay/contribute to the cost? • Discuss the government / taxpayer role in financing higher education • Long term supply side benefits e.g. more skilled work force	**(9)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	**1–3**	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	**4–6**	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	**7–9**	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Answer	Mark
(e) continued	**Evaluation 6** • Difficult to quantify exactly what should be charged for what subjects – figures can change over time • May be problematic for those from poorer families, who may see the higher cost of certain degrees as prohibitively expensive • Discussion of the concept of a 'broader education' – are degree choices simply about money. A creative arts subject may reduce earning potential when compared to the average but such subjects are essential for any liberal education	**(6)**

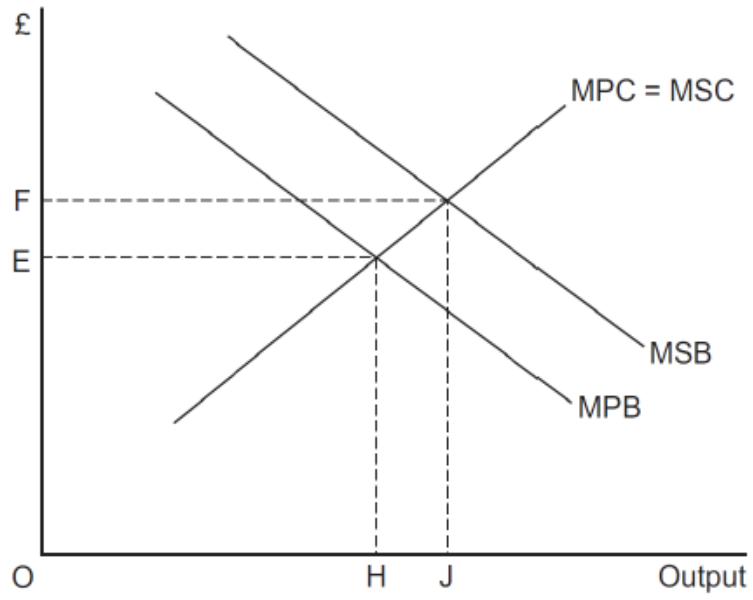
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	**5–6**	Evaluative comments supported by relevant chain of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(f)	**Knowledge 4, Application 4, Analysis 6** The extracts contain plenty of examples from an international context. • Re-designing the structure of fees in England according to the 'value of the degree' • This could be done by subject, institution etc. • Cutting fees for poorer groups and introducing maintenance grants • The US model where top institutions charge high fees and state universities much lower ones • The European model of lower fees • A graduate tax as in Germany • Discussion of efficient/inefficient allocation of resources • Education as a merit good • External benefits application (with appropriate diagram) • Impact on income inequality/fairness/impact on poorer communities • Free market system will discourage 'fringe degrees' and focus on degrees that offer more vocational benefits that pay higher salaries (Good or bad?) Candidates may use supply and demand analysis to develop the idea of different subjects charging different fees.	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	**1–3**	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	**4–6**	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two stage chains of reasoning only.
Level 3	**7–10**	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	**11–14**	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Answer	Mark
(f) continued	**Evaluation 6** England is similar to the U.S. and quite different from Europe • Good evaluation will consider the strengths and weaknesses of each method • European approaches recognise the increase in graduate earning potential and the much higher taxes that graduates will pay in the future. They are much cheaper at the point of use and encourage applicants from poorer families. The taxpayer pays the majority of the cost at the point of use • U.S. and English approaches recognise that the consumer of education must pay at the point of use and be prepared to make a personal investment in future earning power. Students are encouraged to consider whether their degree is worth the cost. If creative arts confer no benefits, then why study them?	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	**5–6**	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Question Number	Answer	Mark
(g)	**Knowledge 4, Application 4, Analysis 6** Education creates positive externalities in consumption. Left to the market alone there will be under-consumption of education. This can be illustrated through an externalities diagram:  	

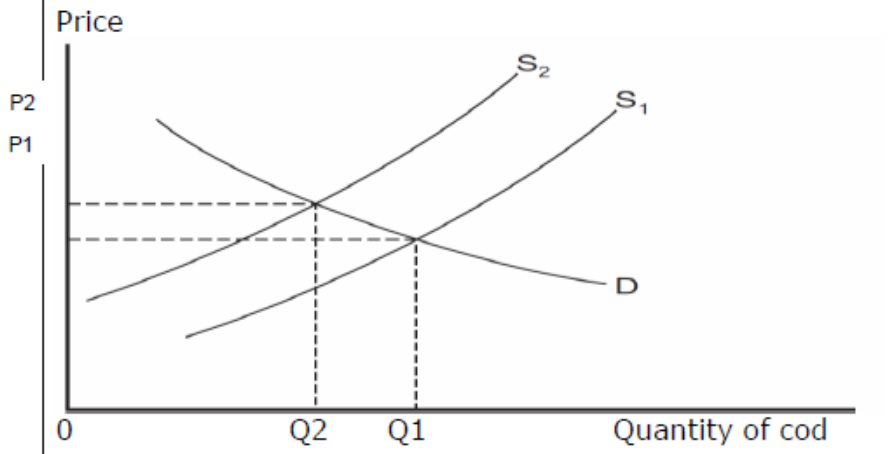
	• The diagram below shows the marginal private benefit (MPB) and marginal social benefit (MSB) curves and the marginal private cost (MPC) and marginal social cost (MSC) curves for higher education • The external benefits of education are social benefits that spillover to benefit others in the society and future generations. These include lower government health, welfare, and prison costs; strengthened democracy, human rights, political stability, and social capital; less crime and poverty; environmental benefits; better international competitiveness; new ideas and diffusion of technology • Government intervention can be used to ensure that the optimum quantity of education, J, is consumed rather than the free market outcome at H	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	**1–3**	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	**4–6**	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two stage chains of reasoning only.
Level 3	**7–10**	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	**11–14**	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Answer	Mark
(g) continued	**Evaluation 6** • There is a significant issue of measurement where externalities are concerned • Many of the social benefits identified above are 'vague' and ambiguous • As a result there can be considerable 'government failure' in education • Understanding of government failure as intervention that results in a net welfare loss; how is government supposed to know which degree level subjects are in demand in the future? • Causes of government failure: o distortion of price signals o unintended consequences o excessive administrative costs o information gaps	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	**5–6**	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Q5.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge** 1 mark for original supply and demand diagram with original equilibrium **Application** 2 marks for using source data explaining change in supply e.g. • Cod catch limits cut (1) by 50% (1) • Reduced limited TACs agreed for Celtic Sea/Irish Sea/west of Scotland (1) • Relevant use of data from Figure 1 (1+1) e.g. Identifying the country that is overfishing (1) Identifying the amount of overfishing (1) **Analysis** Accurate diagram – showing price rise or candidate states price rise (1) correct shift in supply (1) e.g.  	(5)

Question Number	Indicative content	Mark
(b)	**Knowledge 2, Application 2, Analysis 2** Reasons why fishing as much as possible is rational • **This is completely rational from the perspective** of a fishing company, which has revenues clearly linked to size of catch. • Shows an understanding of profit maximising behaviour. '**Private producers will act in their own self-interest and exploit common access resources to maximise profit.**' • **Figure 1 shows Sweden fishing at an excess of 52.4% in excess of TAC.** • Using techniques to increase the size of the catch will help to minimise costs • **'Common access resources provide an opportunity for individuals to create profit, while spreading negative externalities to everyone else.'** **NB KAA can be treated as Evaluation and vice versa**	**(6)**

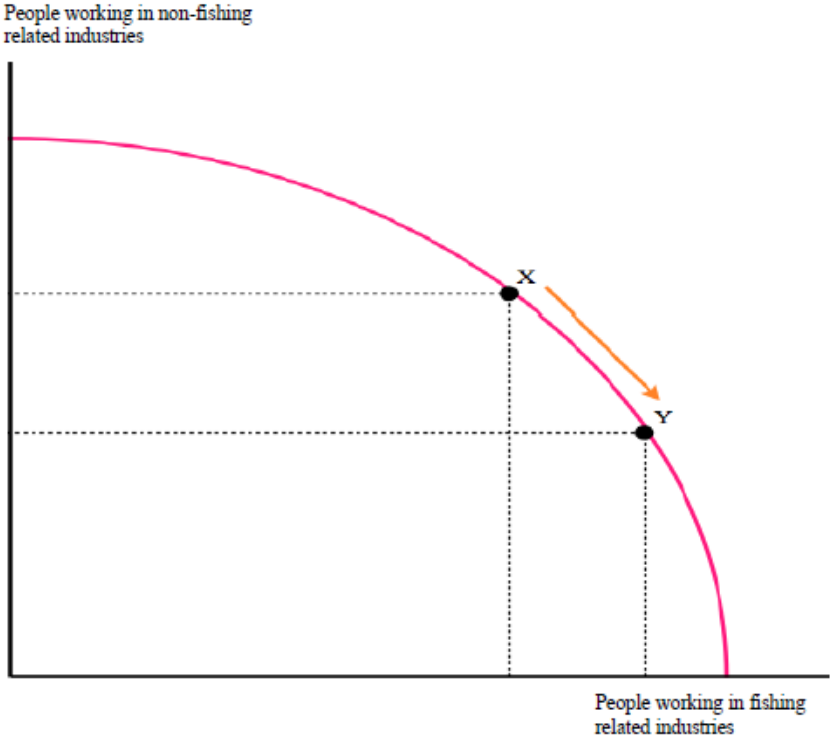
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	3–4	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	5–6	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(b) continued	**Evaluation 4** Reasons why fishing as much as possible is irrational: • 'Exploitation is unsustainable and will lead to the depletion of resources; this is known as the tragedy of the commons.' • Short run profits means that stocks are rapidly depleted so in the long run there are no resources for them to fish e.g. individual firms find that dwindling fish stocks mean their own revenue base is contracting. '90% of fish stocks are depleted.' • It may be rational for firms to behave this way but also it is harmful to society of which those firms are a part e.g. negative externalities impact society as a whole	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(c)	**Knowledge 2, Application 2 Analysis 2** **Knowledge and Analysis (1+1)x2** • Excludability (1) e.g. private ownership enables individuals to charge for the use of an asset (1) • Private ownership of resources (1) e.g. land, labour, capital and enterprise may be exploited by private individuals or firms (1) • Rivalry (1) e.g. private owners of resources can choose to buy and sell resources in order to generate profit (1) • Private ownership in a free market economy may lead to wage disparities or other inequalities (1+1) **Application (1+1)** 1 mark for use of Extract B e.g. 'private producers will act in their own self-interest' individuals 'maximise profit' 1 mark for use of own knowledge e.g. private ownership of a resource means someone is accountable for it (1) If someone owns something then they legally stop other people from using it (1)	**(6)**

Question Number	Answer	Mark
(d)	**Knowledge 2, Application 2** 1 mark for e.g. Identifies the correct formula (1) e.g. the formula for XED is %ΔQD Good A/%ΔP Good B -8 = x/2% (1) -8 x 2% = -16% (1) (decrease in quantity demanded of bags of chips) 950 000 x 16% = 152 000 (1) 950 000 – 152 000 (1) = **798 000** **If correct answer is given award all 4 marks. Award up to 3 marks for correct working but overall correct answer missing.**	**(4)**

Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** Impacts can be positive or negative. • Understanding of specialisation. The number of workers in the fishing industry relative to other workers will be more in Scotland relative to the rest of the UK:  **NB If there is no valid diagram - maximum level 2 KAA**	

	Advantages might include: • Fishing fleets develop expertise based on years of experience • This will be the case for both labour and capital • Fishing ports have the infrastructure to process the catch and to distribute it to markets in the UK and overseas • Employment opportunities will be available and will grow as the industry develops • Specialisation enables training providers to specialise in developing skills for workers in the region - more resources can go in to	**(9)**

	preparing for fishing industry without having to invest in training in other areas. • Spillover effects - skilled labour more freely available so if a new worker is needed they can benefit from training with a different company • Efficient use of resources – a region that specialises in fishing due to availability of resources e.g. good fishing grounds. • Creates jobs – people of Scotland will be able to find employment in the fishing industry • Scotland specialising in the production of fish can catch more and then trade with other countries who specialise in the production of other goods. • By catching more fish the economy can sell these, increasing income in the Scottish economy • By specialising and division of labour increasing output/ reducing costs of production the economy can improve income, living standards. **NB KAA can be treated as Evaluation and vice versa**	

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	7–9	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** There are many disadvantages of specialising in the production of goods and services to trade: • Over-exploitation of resources leaves economic agents over-exposed, leading to possible business failures and job losses • The reduction of the cod TAC could lead to major issues for Scottish fishing • External costs related to congestion and pollution • Demand for fish falls with the increased trend towards vegetarianism and veganism, the economy would be at risk • Workers could find it difficult to transfer to other industries if they are over-specialised • Current consumption may be unsustainable leading to reduced incomes for future generations	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
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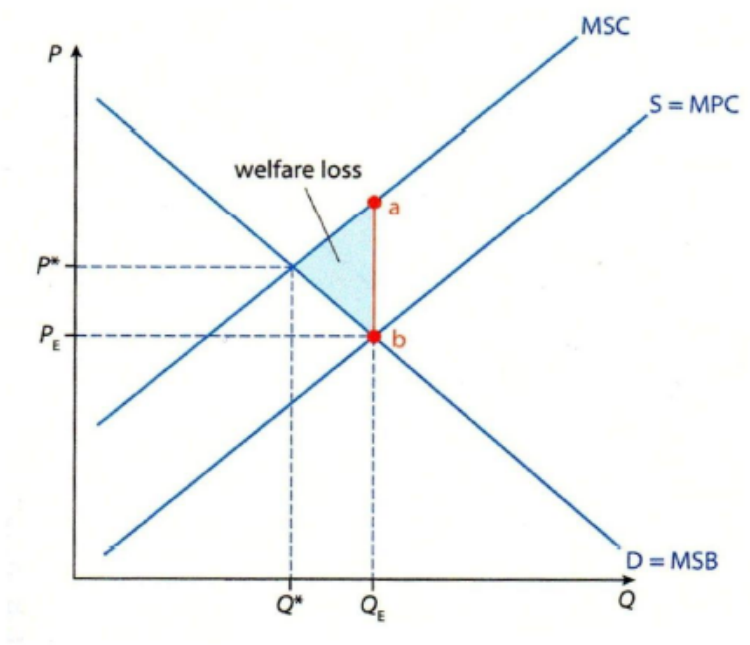
Question Number	Indicative content	Mark
(f)	**Knowledge 4, Application 4, Analysis 6** Overfishing is a negative externality in production. Diagram e.g.  **NB If there is no appropriate diagram - maximum level 3 KAA**	

	Figure 1 shows the scale of the overfishing for different nations, e.g. Sweden's TAC is 52.4% above what the scientists advise. Multiple external costs are referred to in the Extracts. Extract B states that '90% of fish stocks are depleted.' The cod TAC should be reduced in order to reduce the extent of the overfishing. This would reduce the quantity caught from Q_E to Q*. Possible external costs/third parties that might be affected • Fishing nets can damage wildlife, costing wildlife charities to rescue and rehabilitate animals • Fishing boats spill oil which has a negative impact	**(14)**

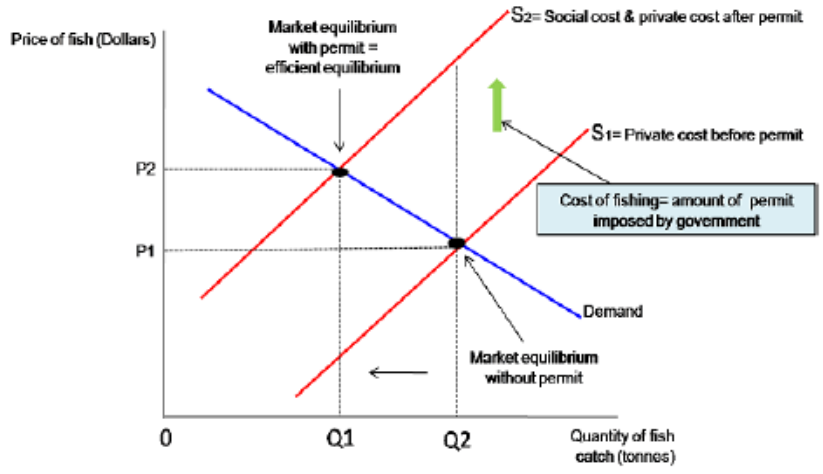
	on those swimming in the sea or wildlife, clear up for Environment Agency etc • Fishing industry throws any over catch back in to the sea, this can pollute the water • Smell from fishing industry can have a negative impact on those that live near the ports • Overfishing increases supply - lowers price and this has negative impact on manufacturers of other food items.	

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
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Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(f) continued	**Evaluation 6** • Hard to put a value on external costs - how do you value harm to wildlife • Some impacts are slow to emerge • External benefits may exist - jobs in fish food processing plants, boat building and net making industries • Technology improves meaning risk of oil spills reduces • Net manufacturers are developing safer nets - fishing industry more aware of the need to dispose of nets appropriately • New method of fishing are reducing the external costs • TACs have helped to reduce the external costs	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Question Number	Indicative content	Mark
(g)	**Knowledge 4, Application 4, Analysis 6** **Do not award policies involving changes in the total allowable catch (TAC) per country** There are a range of policy options available to reduce over-fishing: Ways might include: • Provision of information, so that consumers can be encouraged to consume sustainably • Regulation e.g. designated areas for fishing allowing stocks to recover • Extension of property rights to international waters • Agreements on shares of fish that can be caught • Imposing indirect tax on fish to reduce consumption • Subsidy paid to firms to use safer technology • Minimum price for fish • Government permits awarded to fishing companies may be tradable • The answer may be supported using a relevant diagram e.g.	**(14)**



NB If there is no appropriate diagram - maximum level 3 KAA

Level	Mark	Descriptor
	0	A completely inaccurate response.
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Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(g) continued	**Evaluation 6** Evaluation of policies might include; • Unintended consequences, such as illegal fishing • Excessive administrative costs • Information gaps, with consumers unaware of the extent of the damage being caused by over-fishing, not knowing level of tax to implement etc. • UK may increasingly over-fish since leaving the EU • Relative benefits/costs of government intervention versus market-based solutions • Government unaware of the right level of intervention	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Q6.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge/understanding** 1 mark for infinite wants and finite resources (1) **Application** 1 mark each for any one of the following for infinite wants: • Consumers of health care have a growing list of medical concerns for essential/non essential treatment/waiting list 4 million (1) • Ageing population (1) • New medical technologies(1) 1 mark each for any one of the following for finite resources: • Number of doctors/nurses (1) • Number of hospital beds available/bed occupancy rates 99% (1) use of Figure 2 e.g. • Waiting time has increased from 5.7% (1) to 10.7% (1) **Analysis** Up to 2 marks for any one of the following in linked development OR two limited examples of analysis (1+1): • Health resources are scarce (1) so Hospitals have to make choices about who to treat (1) • Decisions need to be made on what, how, why and for whom to treat (1+1) • Opportunity cost of making a medical choice/decision (1) • Government health priorities (1)	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 2, Analysis 2** **Knowledge/understanding** 2 marks for e.g. • producers know more than consumers (1) or the information is incomplete or imperfect (1) • misallocation of resources (1) **Application** 1+1 mark for e.g. • risk of requiring health care is an unknown (1) • Doctors know more than patients (1) **Analysis** Up to 2 marks for any one of the following in linked development to market failure OR two limited examples of analysis (1+1): • Under consumption of healthcare (1) so patients' health conditions deteriorate (1) • Consumers overcharged for health treatment (1) as they are unaware of the true cost of health care (1) • Unnecessary treatment (1) as consumers unaware of health needs (1) • Patients lack of awareness of waiting times and NHS priorities (1)	**(6)**

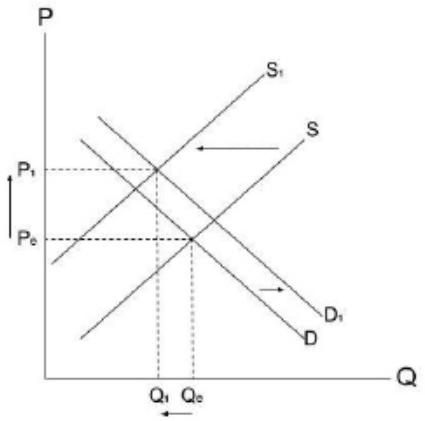
Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 2** • Knowledge – public goods are non-excludable and non-rivalrous • Application - Extract C suggests public parks exhibit these features Reasons why they are public goods • 'free use' i.e. do not have to pay to enter • 'share the park with other users' • 'no exclusive use of the park' • Park run users 'share the park' with other users indicating one person using the park for a run does not have an impact on another person's enjoyment so non-rival. **NB Reasons for/against being a public good may be presented as either KAA or EV**	**(6)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	3–4	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	5–6	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(c) continued	**Evaluation 4** Reasons against being public good • Local authorities planning on charging parkrun participants using public parks • Public parks already have exclusive areas e.g. booking tennis courts or football pitches • Parks may be rivalrous in consumption e.g. Hundreds of park run participants may get in the way of other users. • Parks are also excludable because they already have exclusive areas, gates can be closed at certain times	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(d)	**Knowledge 2, Application 2** £12 * 450 million (1) = £5.4 billion (1) £5.4 billion * 90% = £4.86 billion (1) £5.4 billion - £4.86 billion (1) = £0.54 billion £5.4 billion * 10% (1) = £540 million (1) **NB Award 4 marks for a correct answer of £540 million/£0.54 billion. Award up to 3 marks for correct working but overall correct answer missing.**	**(4)**

Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** Demand shifting right and/or Supply shifting left e.g.  Reasons for demand shifting right: • Ageing population, migration • Medical technological advances • NHS as a substitute less attractive, inferior good, waiting times. • Peer pressure Reasons for supply shifting left: • high management and administrative costs • salaries/wages rising due to doctor/nurse shortages • removal of subsidy/higher tax on private health care treatment • rising rents of private hospitals • rising cost of machinery in health care. **NB For Level 3 KAA one relevant diagram.**	**(9)**

Level	Mark	Descriptor
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Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
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Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** • Magnitude depends on how proportionately large the shift in demand or supply is as a key determinant • Price elasticity of demand may be more price elastic in the long run, given improvements in the NHS, discouraging further price increases • Price elasticity of supply may be relatively price inelastic, given health infrastructure, so price rise may be very significant • Other factors may reduce price e.g. government subsidies, productivity gains, healthier lifestyles.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Indicative content	Mark
(f)	**Knowledge 4, Application 4, Analysis 6** Define excess demand. Application of excess demand to state funded health care. Government interventions: Factors influencing demand and supply (PES) that may result in the removal of excess demand (new hospitals built/doctors trained). Purpose of intervention with reference to market failure and using diagrams in various contexts: • government spending on direct provision increases supply • charging for NHS health care rations • indirect taxation (ad valorem or specific) on sugar/high fat content food/drinks or cutting taxes on healthier lifestyle options • subsidies on healthy food/gym memberships • maximum and minimum prices on healthy and unhealthy food/drinks Other methods of government intervention: • state provision of public goods e.g. public parks • provision of information e.g. 5 a day • regulation e.g. restricting sugar content • o subsidising private treatment	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
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Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(f) continued	**Evaluation 6** Government failure to reduce excess demand. Understanding of government failure as intervention that results in a net welfare loss; consumers face an under provision of food/drink that satisfies them i.e. marginal social benefits now exceed marginal social costs. Consumer choice restricted e.g. heavily subsidised healthy school meals and regulations against unhealthy options. Causes of government failure: • distortion of price signals • unintended consequences – charging for health care results in under consumption. • excessive administrative costs • information gaps – what is healthy, concerns about low sugar food/drink contents • time lag of the policies • magnitude depending on size of funding change. Irrational consumer behaviour - peer pressure.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

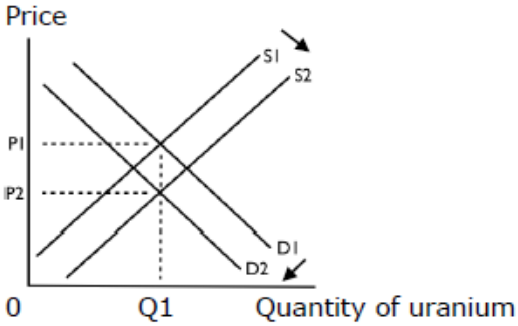
Question Number	Indicative content	Mark
(g)	**Knowledge 4, Application 4, Analysis 6** Distinction between free market, mixed and command economies: reference to Adam Smith, Friedrich Hayek and Karl Marx Disadvantages of free market approach: • Free market under provision of health services, with large external benefits (SMB>SMC analysis), below social optimum. • Sick unable to work – loss of potential output, PPF. • Addressing concerns on affordability to access health care, insurance and information gaps e.g. preventative earlier treatments for elderly and children. • Misallocation of resources on administration of charges. • Profit incentive misallocating resources ahead of patient needs. • Asymmetric information on need to pay for treatment and quality of care. • Missing markets for elderly, children, remote rural areas.	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two stage chains of reasoning only.
Level 3	7–10	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(g) continued	**Evaluation 6** Functions of the price mechanism to allocate resources in private health sector or NHS: • rationing • incentive • signalling • 'Private health care increases choice for users, encourages competition and drives up standards of care.' • Mixed economy acts as a compromise between the advantages and disadvantages of a free market economy and a command economy. • Mixed economy features disadvantages of both a free market economy and a command economy and has no advantages of either. • NHS is more efficient and offers better care than private sector so why allow private sector to exist. • NHS waiting lists and lack of choice. • Information failures.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Q7.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 2, Analysis 2** **Knowledge** 1 mark for an increase in supply or a decrease in demand. This may be illustrated on a diagram **Application** 2 marks for using source data explaining change in supply and demand, e.g. • Estimated surplus (1) of approximately 7 million kg of uranium (1) • Kazakhstan's production has increased significantly/stockpiles (1) • Confidence in nuclear industry declined/Japan closed some of its nuclear plants (1) **Analysis** Accurate diagram – showing price fall (1) correct shift in demand **and** supply (1) e.g.  	**(5)**

Question Number	Indicative content	Mark
(b)	**Knowledge 2, Application 2, Analysis 2** • Shows or demonstrates understanding of price elasticity of supply. • Reasons why uranium is price inelastic. • Diagram to show price inelastic supply. • Time. Two years to build a uranium mine in Spain, ten years in 'development', difficult to find in right concentrations. • Factor immobility e.g. uranium mine cannot be switched to other uses • Regulation. 'Have to clear extra hurdles' due to government concerns regarding negative externalities. **NB KAA can be treated as Evaluation and vice versa**	**(6)**

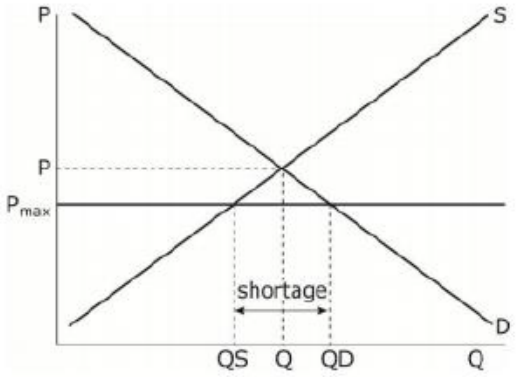
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 2	3–4	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or the answer may lack balance.
Level 3	5–6	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are applied appropriately to the broad elements of the question.

Question Number	Indicative content	Mark
(b) continued	**Evaluation 4** Reasons why uranium is price elastic: • Time. Ability to store stockpiles of uranium, Figure 1 surplus suggests and 'stockpiles until 2020'. • 'Uranium is a relatively common metal'. Extract A Line 2 • Distinction between short run and long run and its significance for elasticity of supply. By 2018 mine in Uranium producing '2.2 million kilos a year'.	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Answer	Mark
(c)	**Knowledge 2, Application 2 Analysis 2** **Award up to 3 marks for each reason:** **Knowledge/understanding** • Identification of two separate reasons: inertia, computational problems, information gap, all providers increasing prices over time. (1) **Application** 1 mark for, e.g. • 'Irrational consumers pay the price'. (1) • Energy prices have risen by 158% in the last 15 years.(1) • Four million households are still on the most expensive energy rates. (1) **Analysis** Linked development of why not switching to a supplier offering lower prices (1) **e.g.** • Inertia (1) despite a decade of rising energy bills (1) as consumers do not have the time or motivation to switch (1).	**(6)**

Question Number	Answer	Mark
(d)	**Knowledge 2, Application 2** **Knowledge/understanding** 2 marks for e.g. Renewable energy is a resource made from something which can be renewed itself/infinite supply (1) Non-renewable energy is a resource which once exploited cannot be replaced/finite supply (1). **Application** 2 marks for, e.g. Energy generated by nuclear or coal is non-renewable (1) Solar or wind energy is renewable (1).	**(4)**

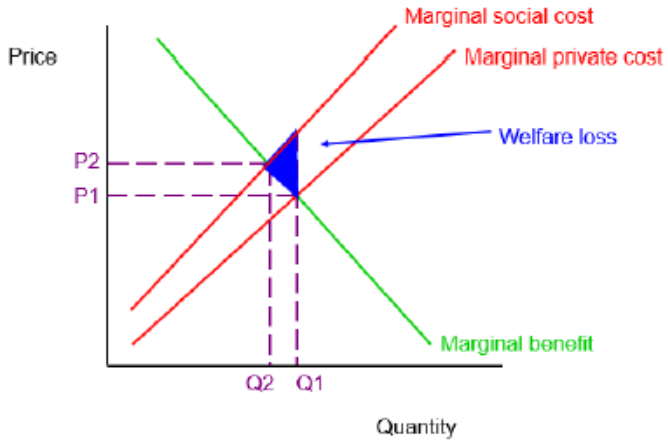
Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** • Understanding of maximum price.  The effect of a maximum price on consumers: • Energy prices more affordable for consumers, end of 'decade of rising energy bills', extension in demand for energy or increase in quantity demanded (inefficient use). The effect of a maximum price on producers: • Contraction in supply or decrease in quantity supplied, power stations turned off 'undermine energy market', decline in producer surplus or revenue/profit. **NB Level 3 responses must consider the effects on both energy consumers and producers.** **NB If no valid diagram then the maximum of Level 2 may be awarded**	**(9)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	7–9	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

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Question Number	Indicative content	Mark
(e) continued	**Evaluation 6** • It depends on whether and how far the maximum price is below the market equilibrium price. • It depends on the PES of energy. • It depends on the PED for energy. • Comment on the costs to consumers – loss of consumer surplus, energy shortages, 'higher prices in the future'. • Comment on the impact on producers – producer behaviour e.g. may move up to the price cap, reduce investment • Government failure e.g. distortion of price signals, unintended consequences	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant chain of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

Question Number	Indicative content	Mark
(f)	**Knowledge 4, Application 4, Analysis 6** **External Cost:**  Diagram(s) accurately drawn – with clearly labelled 'welfare loss' shaded triangle Explain costs to third parties in context. External costs: • Risk of nuclear accident – local schools and businesses close, impact on property prices. • High doses of nuclear radiation leaks increase the risk of cancer – loss of family income, employment, contribution to local economy, costs to NHS. • Cost of storage for future generations – opportunity cost of resources (land) tied to this, resulting in loss of income to farmers for example. • Opportunity cost of subsidies to nuclear industry, subsidy cuts to solar businesses. **NB KAA can be treated as Evaluation and vice versa** **NB If there is no Diagram, max Level 3**	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two stage chains of reasoning only.
Level 3	7–10	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(f) continued	**Evaluation 6** Reduced external costs in production of substitutes/external benefits may mean it is under-produced: • Curb greenhouse gas emissions which are causing climate change, by using nuclear, resulting in less flooding or storm damage reducing insurance costs to businesses. Extract C • Building new nuclear reactors allow positive local economic effects from job creation. • Provide 'affordable energy' helping businesses stay open thus protecting jobs and ending fuel poverty resulting in lower demands for health care. Other evaluation points might include: • Magnitude – depends on relative size of external cost. • Measurement difficult – putting a value on external costs. • Energy efficiency measures more preferable. • Short term/long term costs and benefits.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Question Number	Indicative content	Mark
(g)	**Knowledge 4, Application 4, Analysis 6** Reasons for government intervention e.g. to correct market failure Link intervention to reducing carbon emissions. Appropriate diagram(s) accurately drawn. Ways might include: • Indirect taxation (ad valorem and/or specific) on carbon emissions providers e.g. coal/gas power stations, or workplace parking, reference to taxes directed at getting people out of their cars • Subsidies to solar/wind/nuclear energy/cycling/public transport • Maximum price on low/zero carbon emissions providers and minimum prices on carbon emitters. • Tradable pollution permits e.g. EU emissions trading scheme. • Provision of information, energy efficiency measures. • Regulation e.g. shut down all coal-fired power stations by 2025, reduction in car emissions by using low emission zones. **NB KAA can be treated as Evaluation and vice versa** **NB If there is no Diagram, max Level 3**	**(14)**

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–3	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	4–6	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response or superficial, two stage chains of reasoning only.
Level 3	7–10	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to apply economic concepts and relate them directly to the broad elements of the question with evidence integrated into the answer. Analysis is clear and coherent, although it may lack balance. Chains of reasoning are developed but the answer may lack balance.
Level 4	11–14	Demonstrates precise knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using appropriate examples. Analysis is relevant and focused with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(g) continued	**Evaluation 6** Why the ways given may or may not be successful e.g. • Distortion of price signals. • Unintended consequences, energy shortages. • Excessive administrative costs, pollution permits. • Information gaps, external costs of non-carbon based energy sources, questioning link between carbon emissions and climate change. • Government failure to provide, solar and wind power 'vary with weather', nuclear accidents. • Relative benefits/costs of government intervention versus market based solutions.	**(6)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Q8.

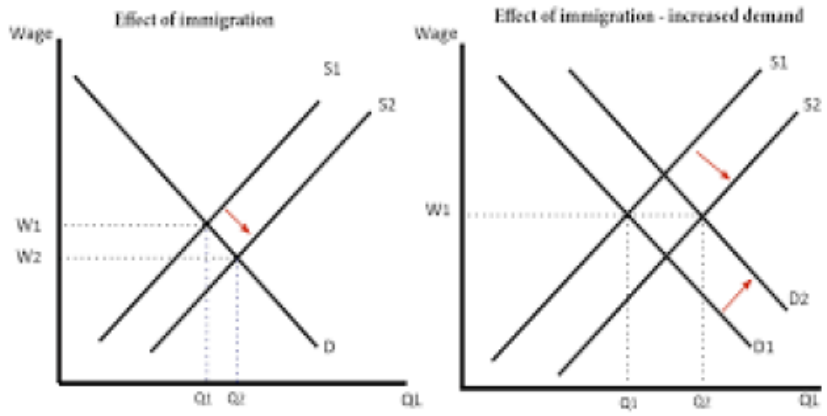
Question Number	Answer	Mark
(a)	**Knowledge 2, Application 2, Analysis 1** **Knowledge and analysis** 3 marks for identifying market structure and relevant features. Points might include: • Monopolistic competition or highly competitive (1) • Many small sellers in the market (1) • Low price setting power (1) • Firms sell differentiated goods (1) • Normal profit/low profit margins as a sign (1) of low barriers to entry/exit (1) • Allow up to 2 marks for diagrammatic analysis **Application:** 2 marks for data (1+1 or 2): point might include: • there are many firms 10 000 to 20 000 (1) • cheap, low skill labour are possibly migrants (1) • low level of capital required (1) • everyone paying the same £5 (1) • some offering inside and out washes (1) / similar car washing at each provider (1) • Availability of cheap premises make market entry easier (1)	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 2, Analysis 2, Evaluation 2** **Knowledge/ implicit understanding:** (1+1) marks for **two** reasons and explanation e.g. • HCWs are inferior goods if demand rises when incomes fall • HCWs at £5 are a very small percentage of consumer income so they might be seen as essential or basic goods • Other factors affect demand apart from income, for e.g. availability and price of substitutes (automatic car washes [might be normal/luxury good] or car washing equipment), working patterns **Application:** (2 marks for any relevant point, or two points 1 +1). Points might include: • Incomes are not keeping up with inflation so real incomes are falling • HCWs at £5 are a very small percentage of consumer income so they might be seen as essential or basic goods. • Increased demand when people have lower incomes – high level of utility at small expense, Extract A paragraph 2 • Extract B: there is a decrease in the availability of automatic car washes as independent petrol retailers go out of business. • Increased number of sites and rents have fallen (Extract A paragraph 3)	

	Analysis (1 + 1)**:** • Linked development of the two points made • Maybe shown by diagrammatic analysis **Evaluation:** (2 marks for any relevant point, two points 1 +1). Points might include: • Subjective happiness is yielded from an HCW, implying that it is rational to use an HCW/it is not rational as washing the car at home is cheaper when incomes fall • Incomes have not been falling over the whole period, so it is more likely that as incomes rise people are buying a HCW as a YED is low (small percentage of income) • Regional or demographic changes in incomes	**(8)**

Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 4** **Knowledge/implicit understanding:** Points might include: • Increased labour supply – workers willing to take low-paid jobs • Arguments also allowed that since the UK left the EU, many workers are leaving – question does not specify immigration or emigration • Increased demand from increased UK population also allowed as an approach **Application:** • Immigrants the main employees at HCWs and similar labour intensive firms (Extract A) • Implication in EU that increased immigration (Extract A paragraph 4) has caused supply to increase and therefore wages half of minimum wage (Ext A last paragraph) • HCW often a first job while the migrant's language improves on arrival in the UK (Ext A) • Following UK leaving the EU many low skilled labour may leave • Workers are not able to migrate as wages are not high enough in sector to be able to migrate to post UK leaving the EU	

	Analysis: • Labour market diagram showing increase in the supply of labour • NMW diagram showing excess supply of labour at the wage floor • Allow decrease in supply, e.g. since the UK leaving the EU • Allow backward bending supply of labour • Allow monopsony diagrams (although not required) • Some segments require more skilled workers and not suit low skilled migrant workers, e.g. valeting • Reference to any industry that relies on migrant workers, e.g. hospitality, nursing, construction **NB if no valid diagram or reference to an industry, then award a maximum of Level 2 KAA**	**(8)**

	Diagram, shift in demand and/or supply, or minimum wage e.g. 	

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	3–5	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.
Level 3	6–8	Demonstrates accurate knowledge and understanding of the concepts, principles and models. Ability to link knowledge and understanding in context using relevant and focused examples which are fully integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems. The answer demonstrates logical and coherent chains of reasoning.

Question Number	Indicative content	Mark
(c) continued	**Evaluation 4** • Impact of UK leaving the EU, Global Health Crisis etc. might put immigration figures into negative, and wages and conditions might improve • Depends on monopsony power • Evidence suggests there is not exploitation, or there is not enough evidence • Some firms are charging a fair wage • Other changes in the pipeline • The size of the changes in migration will dictate the impact on labour market • The ability of workers to move to other sectors/ speed language developed will determine impact on labour market • Within HCW there are sub-markets - some specialise in luxury vehicles - others are mobile operators who visit home - each will be affected differently	**(4)**

Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by relevant reasoning and appropriate reference to the context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.

Question Number	Indicative content	Mark
(d)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** 16 marks for KAA, for causes of the number of firms in an industry to change. Microeconomic causes may include: • nationalisation • privatisation • contestability • market power • economies of scale – natural monopoly • regulation and deregulation • oligopoly behaviour • barriers to entry e.g. factors linked to demand- tastes- preference for HCW over automatic, income, availability of substitutes- decline in automatics	
	Macroeconomic causes may include: • economic growth – e.g. a growing market means more firms will enter • trade patterns • level of protectionism • government policies e.g. supply side policies • TNCs and FDI • unemployment (especially given recent events) • inflation- if inflation is high, costs rise and if unable to increase prices, then firms may exit the market • Level of environmental protection- adds to the costs and may reduce the number of firms. • Exchange rates - if appreciated - costs to import lower and export higher - exporters may exit the market • Relative poverty high and rising - more demand low costs HCW increasing demand and market size - more firms **NB for a Level 4 response there must be micro and macro cause(s). Foreign direct investment, role of TNCs, or regulation could be seen micro or macroeconomics** **NB for a Level 4 response there must be reference to an industry**	

	9 marks for evaluation – points might include: • Depends on the nature of the business. Another industry could be used as a contrast, e.g. a capital intensive industry • Depends on the LRAC and the minimum efficient scale in the current situation • Changes over time – barriers to entry or exit are likely to change e.g. in the face of new technology in car wash industry or other industry • Exchange rates go up and down so could equally depreciate • Environmental protection may create more demand as it is a more ethical service and not cause the number of firms to fall	**(25)**

Knowledge, application and analysis		
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays ability to apply knowledge in context but will focus on small range of elements. Demonstrates understanding by identifying relevant information. Demonstrates knowledge and understanding of terms, concepts, theories and models.
Level 2	5–8	Shows ability to apply economic ideas and relate them to economic problems in context. Displays knowledge and understanding of economic principles, concepts and theories to make limited analysis or narrow analysis.
Level 3	9–12	Analysis is clear and coherent with evidence well integrated, although may focus on some of the broad elements of the question more than others. Shows ability to apply economic ideas and relate them directly to the broad elements in the question.
Level 4	13–16	Analysis is relevant, clear and coherent with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems covering both microeconomic and macroeconomic effects. A clear understanding of economic principles, concepts, theories and arguments.

Evaluation		
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of evaluative comments without explanation.
Level 2	4–6	Evaluative comments with limited explanations. Evidence of evaluation of alternative approaches which is generic or unbalanced leading to limited judgements.
Level 3	7–9	Evaluative comments supported by relevant reasoning and appropriate reference to the context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.

Question Number	Indicative content	Mark
(e)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** 16 marks for KAA, for effects of increased government intervention. Microeconomic effects may include: • Minimum price, living wage enforced, planning issues, tax, health and safety • Rise in wages (if wage floors introduced) will have a large impact on costs. Might be shown on increasing NMW diagram • Effect on price of car washes – consumer surplus falls, output falls, price increases • Impact on quantity of labour/marginal revenue productivity • Impact on productivity • Diagram to show the effect of the intervention approach, e.g. of minimum price as solution to market failure • Price of a car wash might be passed on to higher wages	

	Macroeconomic effects may include: • Income equality improvements – may use Gini coefficient or Lorenz curve • Prices rise – inflationary effects • reduction in levels of poverty • effects on growth – inflexibility in markets can reduce I or FDI • might improve environmental standards • Reduced employment **NB for a Level 4 response there must be micro and macro effect (s). Employment or welfare issues could be seen as micro or macro, for example, can be used as either micro or macroeconomics** **NB for a Level 4 response there must be reference to an industry**	

	9 marks for evaluation – points might include: • Government failure, e.g. regulatory capture, asymmetric information • depends on impact of other events such as UK leaving the EU, high unemployment from recent Global Health Crisis • effect on workforce of employment regulation depends on elasticity for demand for labour, and degree with which it can be replaced with capital • depends on PED of HCW market as a whole • consumers might also have increases in wages • some firms will face decreased demand and go out of business. Loss of jobs and other economic activity • depends on the PED and PES in factor market and product market as a whole • Wash Mark Certificates not government regulation may have more of an impact in improving quality and conditions for workers and reducing pollution than government action	**(25)**

Knowledge, application and analysis		
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays ability to apply knowledge in context but will focus on small range of elements. Demonstrates understanding by identifying relevant information. Demonstrates knowledge and understanding of terms, concepts, theories and models.
Level 2	5–8	Shows ability to apply economic ideas and relate them to economic problems in context. Displays knowledge and understanding of economic principles, concepts and theories to make limited analysis or narrow analysis.
Level 3	9–12	Analysis is clear and coherent with evidence well integrated, although may focus on some of the broad elements of the question more than others. Shows ability to apply economic ideas and relate them directly to the broad elements in the question.
Level 4	13–16	Analysis is relevant, clear and coherent with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems covering both microeconomic and macroeconomic effects. A clear understanding of economic principles, concepts, theories and arguments.

Evaluation		
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of evaluative comments without explanation.
Level 2	4–6	Evaluative comments with limited explanations. Evidence of evaluation of alternative approaches which is generic or unbalanced leading to limited judgements.
Level 3	7–9	Evaluative comments supported by relevant reasoning and appropriate reference to the context. Evaluation recognises different viewpoints and is critical of the evidence provided and/or the assumptions underlying the analysis enabling informed judgements to be made.