PEARSON EDEXCEL A-LEVEL ECONOMICS A · 9EC0

ECONOMICS



MARK SCHEME

1.3 MARKET FAILURE

SCORE	PERCENTAGE
/775	%

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Mark Scheme

Q1.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 1, Analysis 3** **Knowledge/Understanding:** 1 mark for: Understanding or definition of a concentration ratio (1) **Application:** 1 mark for reason e.g. Change in shopping habits which has led to consumers shopping more frequently in discount stores/online shopping from other retailers (1) **OR** The smaller discount stores such as Aldi and Lidl have increased their market share (1) **Analysis:** Award further marks for linked developments e.g. because Aldi and Lidl focus on low prices so their sales have risen faster than those of the big four (1) more convenient to shop at local stores (1) The four firm concentration ratio has decreased by 3.6 percentage points (2) **OR** Calculation of the four firm concentration ratio in 2010 (30.8 + 17.6 + 16.1 + 11.6 = 76.1%) (1) Calculation of the four firm concentration ratio in 2015 (28.6 + 16.5 + 16.5 + 10.9 = 72.5%) (1)	**(5)**

Question Number	Indicative content	Mark
(b)	**Knowledge 2, Application 2, Analysis 4** • Definition of monopsony • Food prices likely to fall **Effects on food suppliers might include:** • Financial problems from delays in receiving payments from supermarkets (Extract A) • Lower prices mean a reduction in revenue and profits • Increased costs due to paying excessive amounts for packaging and promotions. • Losses may even be made • Pressure on suppliers to cut costs • Fall in employment • Some food suppliers may exit the industry • Less funds for investment • Risk that suppliers will reduce product quality • Figure 2 indicates some supermarkets abused their market power e.g. Tesco and Morrisons. **Effects on consumers might include:** • Lower prices mean higher consumer surplus • Impact on food waste • Impact of cost cutting measures on quality of food and consumer choice. **NB for a Level 3 response, candidates must consider both food suppliers and consumers in their answer. Answers must refer to the context.**	**(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	Answer	Mark
(b) continued	**Evaluation 4** • Food suppliers may be able to increase efficiency and so remain profitable and stay in the industry. • Supermarkets may be reluctant to use their monopsony power for fear of GCA, government investigation and possible fines up to 1% of sales revenue. • Consumers may not benefit since supermarkets may not pass on lower costs in the form of lower prices. • Supermarket sector may not be a monopsony as there is more than one buyer –so perhaps less power over food suppliers. • According to Figure 2 some supermarkets may not abuse their position e.g. Aldi and Sainsbury. • Long term implications: exit of firms may risk supplies to consumers. • Consideration of bilateral monopoly e.g. large food supply firms or cooperatives. • Food suppliers may diversify e.g. farm shops. • Food suppliers may undertake vertical integration.	**(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	Answer	Mark
(c)	**Knowledge 2, Analysis 2, Application 2, Evaluation 2** **Knowledge/understanding:** 2 marks for identification of two measures (1+1) **Analysis:** 2 marks for linked explanation of these measures (1+1) **Application:** 2 marks for reference to data (1+1), e.g. • Fines - GCA can fine supermarkets up to 1% of annual revenue (1) • Regulation to ensure payments made within standard time (1) • Price regulation e.g. minimum pricing – to ensure fair prices are paid for supplies (1) /relevant diagram (1) • Promote new entrants and further competition in supermarket sector (1) • Block mergers if it leads to increased monopsony power (1) **Evaluation:** 2 marks for two evaluative comments, OR 2 marks for identification and linked development e.g. • Asymmetric information may lead to regulator making incorrect decisions (1) e.g. too lenient or too harsh on supermarkets (1) • Regulatory capture may arise (1) • Regulator may lack resources to investigate supermarket sector thoroughly (1) • Problems of gaining accurate information from suppliers (1) as they are reluctant to complain (1) • CMA may allow mergers (1) which increase monopsony power of supermarkets (1) • Government may counteract monopsony power by protecting farmers' income e.g. subsidies (1+1) • Problems of minimum price e.g. excess supply/food waste (1)	**(8)**

Question Number	Indicative content	Mark
(d)	**Knowledge 2, Application 2, Analysis 2** • Identification of information gaps as a cause of market failure **Information gaps as main cause of food waste e.g.** • Food suppliers lack market information: e.g. predicting size of harvests – dependent on climate/ pest control and disease/ time lags in growing crops and raising livestock. • Supermarkets lack market information: e.g. predicting household demand – depends on tastes and fashion which may change/ population and migration changes/ impact of competitors. • Consumers lack market information: e.g. uncertainty over how to store food or whether food is fit for consumption after sell-by dates. **Irrational behaviour as main cause of food waste e.g.** • Computation issues e.g. consumers perceived demand may exceed actual demand for food / difficulty in comparing the different size of food products to fit with the actual amount of food required. • Habitual behaviour e.g. consumers may have a tendency to purchase more food than required/ better to have too much than too little food. • Influence of other people's behaviour e.g. consumers may purchase food that they might not want. • Impulse buying e.g. due to advertising or use of special offers. NB These points could count as Evaluation and the Evaluation points as KAA. NB A Level 3 response would typically consider both 'information gaps' and 'irrational behaviour'. NB There may be overlap between information gaps and irrational behaviour as possible causes of food waste.	**(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
(d) continued	**Evaluation 4** • Consideration of relative proportions of food waste e.g. supermarkets appear favourable compared to food suppliers and households. • Other factors could cause food waste e.g. ➢ Misleading advertising by firms so consumers purchase food they do not want. ➢ Transport and storage problems due to road congestion / problems of importing food from overseas. • Consideration of whether it is rational to assume that consumers seek to maximise utility in allocating their expenditure / and firms seek to maximise profits in making production decisions. • Long run information gaps may narrow and irrational behaviour may reduce e.g. improved labelling and social enterprise, advice to customers on how to store food and use leftovers or use of new technology to extend freshness of food. NB These points could count as KAA and the KAA as evaluation.	**(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	Answer	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** **Problems of merger include:** • CMA may block this horizontal merger since the combined firm has 27.4% market share/ exceeds the 25% legal monopoly figure. • Costs to the firms: possible diseconomies of scale such as overlap between location of stores/ co-ordination of staff/ redundancies/ implementation of new IT system (different types of diseconomies of scale may be awarded separately). • Impact of merger on consumer loyalty: the new store may not deliver consumer loyalty, for example, different brands between stores. • Lack of synergies and cultural clash • Underlying market conditions remain: consumers changing their shopping habits and merger does not address this issue. • Impact on food suppliers: increased monopsony pressure on suppliers may lead to reduced choice of food suppliers. An increased risk of GCA investigation. • Consideration of problems of other mergers and acquisitions: for example, BT takeover of EE. NB for a Level 3 response there must be reference to the context e.g. Figure 1 or Extract C.	**(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** • There may be benefits which offset the problems, such as ○ different types of economies of scale e.g. bulk purchase ○ rationalisation of stores and employees could lead to increased efficiency and profitability ○ increased market power • CMA could permit merger as sufficient competition still exists in the sector from online shopping and the growth of discount stores. • Prioritisation of problems with justification, for example, a lot of money could be spent on the proposed merger which is then blocked by CMA. • Short-run and long run implications: enormous upheaval in short run but sufficient cost savings could be made in long run to make it worthwhile.	**(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 recognises different viewpoints and/or is critical of the evidence.

Q2.

Question Number	Answer	Mark
(a)	**Knowledge 2, Application 2, Analysis 1** **Knowledge:** 1 mark for identification of a possible reason and 1 mark for its relevance to a fall in the value of the currency. Possible reasons: • Fall in demand for peso (1) with reason (1) • Increase in supply of peso (1) with reason (1) • Current account balance: ○ Fall in the value of X (1) because export prices have fallen (1) ○ Rise in the value of M (1) because of economic growth (1) • Decrease in interest rates (1) in Chile relative to other countries (1) • Fall in FDI (1) with reason e.g. reduced foreign investment in Chilean mining (1) • Change in hot money flows (1) with reason e.g. speculative selling of peso (1) • Rise in value of other countries' exchange rates (1) with a change in relative rates (1) • Relatively high inflation in Chile (1) compared to other countries with which it trades (1)	
	Application: 2 marks for data references e.g. • Copper prices have fallen, Fig. 1 (1) e.g. to $5000 (1) • The Chilean peso has decreased in value (1) • Calculation based on data (award a range of answers because the data is given for the whole year) e.g. 0.2 to 0.14 = 30% fall (or similar) (1 + 1) • Inflation 5% in Chile (1)/above 2-4% target (1)/ e.g. because of higher unit labour costs (implied by high truck drivers' wages, Extract B) (1) • Fall in FDI as mining dries up, therefore reduced demand for peso • Application of an exchange rate diagram e.g. with peso on vertical axis with shift (1) **Analysis:** • 1 mark for explanation of the process linking to the cause to the identified change e.g. fall in copper prices means that the value of exports fall because demand is price inelastic (1) or imports rise in value because of economic growth sucking in imports (1) diagram showing shifts in demand or supply of pesos linked to correct explanation (1) **NB only award 1 mark in total for use of a diagram**	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 2, Analysis 2, Evaluation 2** **NB an answer might provide positive externalities as KAA and negative externalities as evaluation** **NB do not award effects on copper mining firms, unless an indirect effect.** **NB an answer which does not relate both to firms and communities is limited to 5/6 KAA marks.** **NB do not award externalities themselves, e.g. pollution, the environment. Award the *impact*.** **Knowledge and Analysis** Knowledge/ implicit understanding of externalities **(1)** e.g. knowledge that externalities are an effect on third parties, or outside (or not accounted for by) the market mechanism, or the difference between private and social costs or benefits Firms (in businesses other than mining) Points showing the impact on **firms** might include: • farms lacking water because mining companies are using it **(1+1)** • high demand for energy means that other firms will face high energy costs **(1+1)** • high exchange rate can cause problems for other exporting firms **(1+1)**	

	Communities Points showing the impact on **communities** might include: • problems of water access for households **(1+1)**, • large-scale transport causes noise, air pollution **(1+1)**, • people have to move away to find work (social dislocation) **(1+1)** • impact on employment and incomes as mining declines **(1+1)** • impact on firms that supply the mining sector **(1+1)** Some impacts could be seen as firms and communities, e.g. impact on wider economy of higher wages as firms have to compete with unionised highly paid copper miners for employment. **Application:** • **Externality diagram** illustrating negative or positive impact using marginal analysis (up to 2 marks: 1 mark for correct MSC and MPC drawn, 1 mark for correct equilibrium shown/deadweight loss) • Water has to be pumped 200km (Extract B paragraph 4) which uses fossil fuels/is noisy/ugly/affects tourist areas • Mines are deeper and use more fuel (carbon emissions have impact on climate and therefore on welfare of many) • Desalination plants might affect other firms or consumers (this might be negative or positive)	

	Evaluation (2 marks for any relevant point, two points 1 +1): • Positive externalities, e.g. ○ impact of local multiplier on economy, improved infrastructure affects other industries ○ Improved wages and working conditions for workers (in businesses other than mining) ○ The copper mining has already helped to fund improvements in welfare, such as the financial system and pensions ○ Benefits of higher value of currency, e.g. terms of trade improvement • Difficult to know how large the externalities are or who is bearing the cost • The benefits might outweigh the costs, e.g. reduction in poverty, improved fiscal powers, strength of financial markets, improved local infrastructure • Other standard evaluation points, e.g. Extract B a drought has made the problem more severe, time to acquire environmental impact assessments (Extract B paragraph 5) might not be a reliable indicator	**(8)**

Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 4** • Link between falling copper prices and falling incomes and government revenue e.g. dramatic loss of government revenue from peak of $11.5 billion • Exposure to risk e.g. high proportion of GDP and exports dependent on copper so this could cause risk of falling incomes • Price volatility e.g. might cause reduced FDI/investment • Impact of declining terms of trade might be used • Successful exports of copper might force up the exchange rate, other 'Dutch disease' issues e.g. impact on non-copper sector • Falling demand for copper might cause peso to fall in value, causing declining terms of trade/cost push inflation • May use diagram to illustrate effects of low PES, PED • Award use of concepts or theories such as Prebisch-Singer, with link to terms of trade and changing world incomes. • Firms may close down e.g. Extract A lines 8-9: award a microeconomics diagram showing shutdown point **NB Do not award any parts of answers which are related to externalities** **A KAA point referring to changes in tax revenues can only be awarded Level 3 if a specific link is made to the source of the tax revenue e.g. – corporation tax or profits of a state-owned enterprise** **For a Level 3 answer there must be reference to dependency rather than just falls in copper prices, and the wider economy rather than just copper mining firms**	**(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
(c) continued	**Evaluation 4** • Advantages of copper dependency for Chile's economy: ○ Copper dependency is an advantage when copper prices are high e.g. they have been high for a prolonged period, with many advantages ○ Use of data to support this, e.g. $11.5 bn a year tax revenue, or percentage changes in prices Figure 1 ○ Low national debt, falling levels of poverty, inward direct investment • Other industries thriving e.g. salmon industry • Chile's economy 'best run in the region' and has financial strength to overcome copper price changes, relative to other countries who are dependent on primary products e.g. Venezuela • The fall in the exchange rate corrects the problem of over dependency • Copper prices are far less volatile than 2007-2011	**(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 policies: Microeconomic effects may include: • fiscal, e.g. 'mildly expansionary policies' such as cutting income tax will increase real wages • monetary e.g. cutting interest rates can reduce the costs of borrowing for individuals and firms. • supply side policies, e.g. privatisation, free trade can make markets more competitive • growth and development strategies e.g. education, debt relief etc. can further alleviate poverty • price controls Macroeconomic effects may include: • Cutting interest rate might cause the peso to further decrease in value, which would cause inflation / increase the value of exports leading to current account improving • Privatisation or other supply side policies can increase international competitiveness **NB for a Level 4 response there must be reference to both economic growth (e.g. rising incomes) and economic development (e.g. longer life expectancy through improved living standards) and a focus on effects for Level 3 and above.** 9 marks for evaluation – might include: • Expansionary fiscal policies might involve an improvement in the redistribution of income • Objectives might conflict, e.g. cutting interest rates can cause inflation or widen inequality, or increased government spending to produce growth might cause inflation (e.g. Phillips Curve) • Policies might conflict, e.g. increasing length of time to gain a permit to reduce externalities can cause a negative supply side impact e.g. by raising production costs for firms.	**(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.

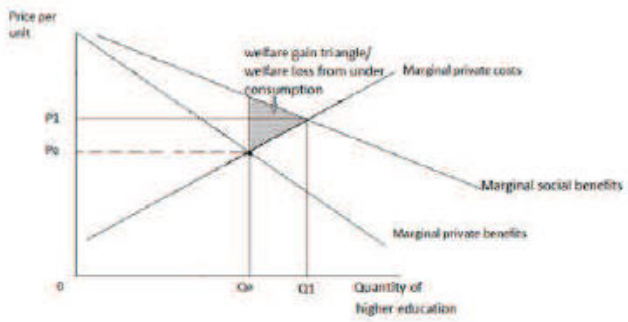
Question Number	Indicative content	Mark
(e)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** **This mark scheme is based on an increase in I, but answer can be given from the point of view of a decrease** Up to 16 marks for effects: Microeconomic effects may include: • Effects on workers – higher incomes, more jobs • Effect on firms, e.g. increase in productivity, or for firms that produce capital goods, a change in demand • Increase in demand as consumer and business confidence improves • Improved quality of life as a result of research into and development of products Macroeconomic effects may include: • Shift (increase) in AD, with multiplier effects, increasing real GDP • Shift (increase) in AS increasing capacity e.g. through investment in education (Extract A paragraph 5) (LRAS shift only, may be implicit) • Inflation, if linked to expansionary macroeconomics policies • Balance of payments – e.g. effects of inward FDI: short term improvement on financial account, long term impact on current account Award Keynesian and Classical approaches with equal weight. The opposing viewpoints may be used as evaluation. **NB a Level 4 answer refer to *changes in* investment rather than levels. This may be implicit e.g. through a fall in AD** **NB do not award for impact other than on Chile. Do not award for causes rather than effects.**	

	Up to 9 marks for evaluation points include: • Investment in capital might decrease employment • Investment in human capital e.g. education in Extract A, is hard to measure in terms of effectiveness • Data points to both increases and decreases in investment. Other forms of injection into the circular flow might be more sustainable, e.g. G • Depends if the investment is internal or FDI as to the effects on the balance of payments • Depends on whether there is a demand deficiency (Keynesian viewpoint) or failings in the supply side	**(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. Evaluation recognises different viewpoints and can be critical of the evidence provided.

Q3.

Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 8, • Define imperfect information/ asymmetric information • Identification of asymmetric information in market for education ○ Not know contents of course- choose wrong course- affect ability to gain career/ enjoyment on course ○ Students not aware of the returns from education e.g. 2 A levels/ degree etc- may under consume/ over consume- missing out on external benefits ○ Not aware of external benefits of education to third parties- under consume leading to under consumption as shown in external benefit diagram ○ True cost of education- books, accommodation, tuition fees etc – may lead some to accrue debts they cannot afford ○ Information not known about some subjects- under consumption may be a problem- e.g. lack of languages teachers, engineers etc.  	**(16)**

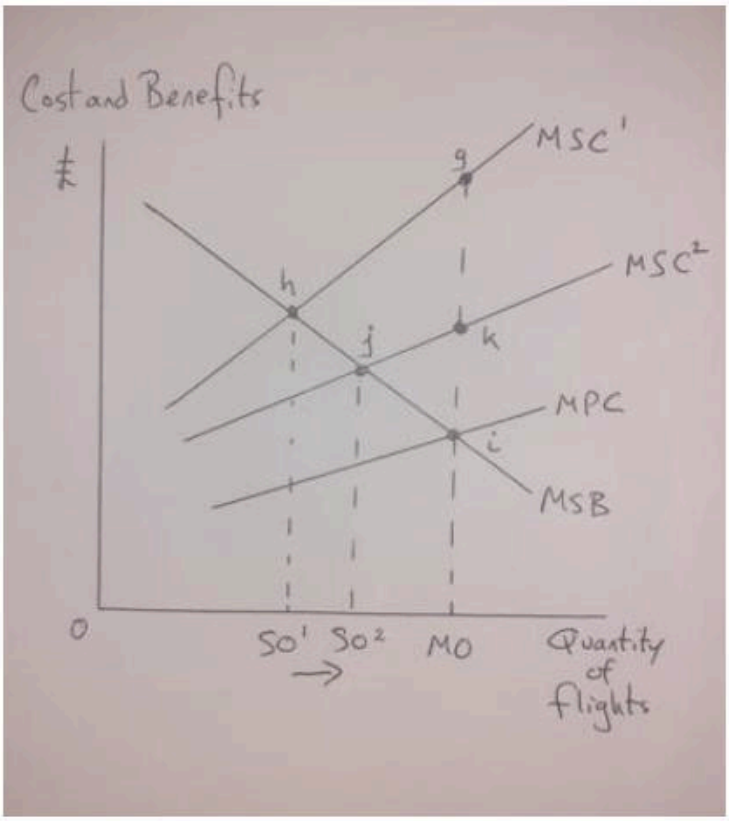
Knowledge, application and analysis		
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains 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 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	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** • information available on internet/ by universities to reduce the problem • Long term- less of an issue as more go to university and friends and family can share information • Can we afford for all to access HE- budget deficit issues • Measurement of costs and benefits hard to quantify to know positions of curves	**(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.

Q4.

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)	

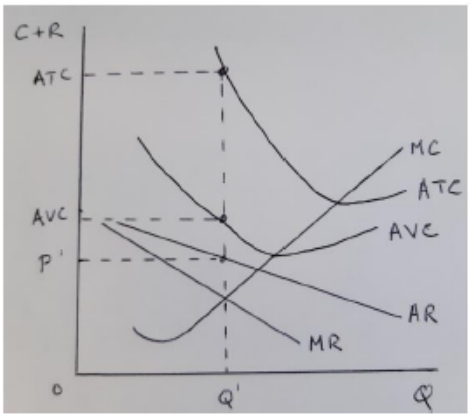
	NB These application points may be annotated on the diagram. **Evaluation:** 2 marks for two evaluative comments, OR 2 marks for identification and linked development of one evaluative comment e.g. • Difficulty in measuring size of negative externality (1) third party effects (1) • CO_2 emissions from 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)**

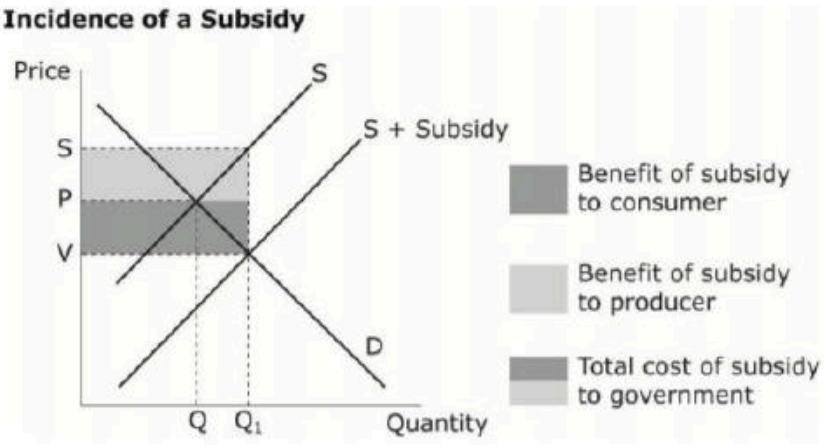
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 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)

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.

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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)**

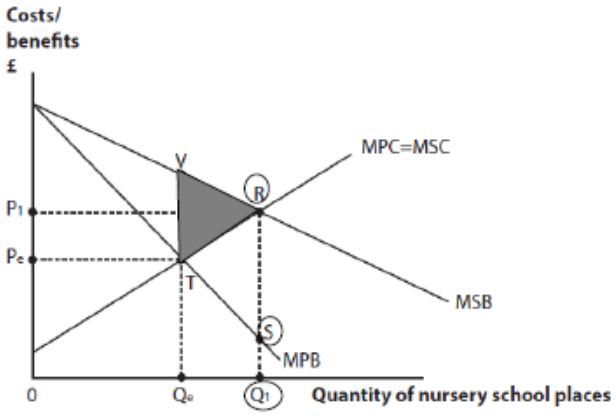
	• Consumers may decide not to buy at higher price - to stay home or become anxious about firms closing and cancelled holidays • Other factors may have caused demand to rise or supply to shift inwards • Market share may not be reallocated to Jet2 • Jet2 is a distant substitute and may not go to same destinations 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.

Q5.

Question Number	Answer	Mark
	Knowledge 1 **Knowledge/understanding** 1 mark for definition of external benefits e.g. • Positive externality (1) • When the social benefits of an economic action are greater than the private benefits (1) • External benefits = social benefits – private benefits (1) • Benefits accruing to a 3rd party (1) • Spillover effects (1) • Outside the price mechanism (1)	**(1)**

Question Number	Answer	Mark
	B	**(1)**

Question Number	Answer	Mark
	Application 2 Identify welfare gain area VTR (1) Annotate or identify the social optimum output as Q_1 or R or S (1)  	**(2)**

Q6.

Question Number		Mark
(a)	**Knowledge 2, Application 2, Analysis 1** **Knowledge:** • 'Good' deflation - Caused by an increase in aggregate supply (1) • 'Bad' deflation - caused by falling aggregate demand (1) **Application:** 2 data references from Extract 1: (2 marks) • For 'good' deflation - falling price of unit of computing power (1) • For 'bad' deflation - recession in eurozone (1) **Analysis**: 1 mark for explanation of the link between: Either • AS and 'good' deflation: because it is caused by new technology; falling raw material prices which result in higher real output (1) OR • AD and 'bad' deflation: because it is caused by falling real wages which result in lower real output. (1)	**(5)**

Question Number		Mark
(b)	**Knowledge 2, Application 2, Analysis 2, Evaluation 2** **Knowledge and analysis:** 1 mark for each reason, up to 2 marks **(K)**. A further 2 marks for supply and demand diagram(s) or further development or explanation **(A)** • Fall in demand - recession in eurozone; slowdown in China and Asia • Increase in supply - shale oil **Application (1+1 marks):** Specific data reference from Figure 1, e.g. fall in oil price from around $115 a barrel in mid 2014 (1) to just over $60 a barrel by the end of 2014 (1) Specific data references from Extract A: e.g. 50% increase in oil supply in USA (1) **Evaluation:** (2 marks for any relevant point): • Prioritisation - discussion of which factor has had the greatest impact • Fall in demand might be more temporary than increase in supply.	**(8)**

Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 4** • Meaning of a cartel: group producers acting together; restricting supply to force up price • The producers act as a monopolist when a cartel is formed • All major producers must be members of the cartel for it to be able to succeed • No new substitutes for the product must be available (in this case shale oil is an effective substitute for oil) • Supply must be controlled – without 'cheating' by individual producers.	**(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
(c) continued	**Evaluation 4** • Much will depend on relative price of oil in relation to sources of renewable energy • A cartel might be more successful in the short run than in the long run when alternatives may be developed and become more available • Less powerful members of the cartel are likely to cheat • Difficulty of controlling activities of major producers • Impact of increase in shale oil/gas production • Inability to prevent entry of new producers (discussion of the degree of contestability in the market.	**(4)**

Level	Marks	Descriptor
0	0	No evaluative comments.
1	1-2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
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 4, Application 4, Analysis 8, Evaluation 9** Microeconomic effects: • on consumers - increase in real value of savings; falling prices so increase in consumers' surplus • on producers - lower input prices leading to falling costs of production and possibly higher profits • on workers - could result in nominal wage cuts • on shareholders - falling profits might result in falling dividends. Macroeconomic effects: • impact on Investment - less incentive for firms to buy capital equipment • impact on Employment - could lead to a 1930s type depression with massive unemployment • impact on Economic growth - could result in prolonged depression • impact on Real value of a country's national debt increases. Possible evaluation points include: • impact depends on the causes of deflation – whether it is 'good' or 'bad' • consumers face increase in real value of mortgages and debts • producers face falling revenues and profits • impact on macroeconomic variables (growth, employment, balance of payments) dependent on type of deflation.	**(25)**

Knowledge, application and analysis		
Level	Marks	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 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	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	Marks	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.

Question Number	Indicative content	Mark
(e)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** Microeconomic effects: • impact on costs of production resulting in higher profits for businesses • impact on revenues and profits of oil companies (reference to price inelasticity of demand) • impact on investment decisions by firms in the oil market, especially with reference to shale oil • impact on wages of workers in oil industry • impact on consumer real incomes and on demand for other goods and services • impact on green energy industries (reference to cross elasticity of demand). Macroeconomic effects: • lower global rates of inflation (AD/AS analysis) • impact on global growth rates • impact on balance of payments on current accounts of oil importing countries and oil exporting countries • impact on $C0_2$ emissions: consideration of impact on climate change on different countries - reference to external costs. Possible evaluation points include: • impact on different industries will depend on their oil costs as a proportion of total costs • impact on households will depend on cost of oil in household budgets • impact on demand for other goods and services will depend on other factors e.g. state of world economy, consumer confidence, household debt • impact on inflation rates and growth rates depends on elasticities of AD and AS curves • impact on balance of payments on current account of different countries depending on whether they are net importers or net exporters of oil • impact on external costs depends on how different price elasticity of demand for oil.	**(25)**

Knowledge, application and analysis		
Level	Marks	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 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	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	Marks	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.

Q7.

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.

Q8.

Question Number		Mark
(a)	**Knowledge 2, Application 2, Analysis 1** **Knowledge** 1 mark for identification of a possible cause and 1 mark for its relevance to energy use Possible causes: • Increase in world population (1) • Increase in devices requiring electricity (1) • Increase in world GDP and living standards (1) **Application**: 2 marks for data references from Figure 1 (identifying the forecast change): • Demand for nuclear and renewable more than double • Demand for gas doubles • Demand for coal and oil increase by between 30% and 50% • Comment on increase in overall demand **Analysis:** • 1 mark for explanation of the link between the identified case and energy use	**(5)**

Question Number		Mark
(b)	**Knowledge 2, Application 2, Analysis 2, Evaluation 2** **Knowledge and analysis** • Increasing injections (exports) **(K)** may lead to a boost to the circular flow and an increase in AD if not offset by greater leakages **(A)** • Decreasing leakages (imports) **(K)** may lead to a reduction in the circular flow and reduce AD **(A)** **Application:** • Exports increasing, imports decreasing, but until 2020, leakages still greater than injections so overall leakage from circular flow (2) • Or 2 specific data references from figure 4 **Evaluation** (2 marks for any relevant point): • These are forecasts so the impact on the circular flow may be different from that described above • Other injections and leakages influence the circular flow which may offset the changes described above	**(8)**

Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 4** • recognition that gas and solar energy/nuclear energy are substitutes • application of cross elasticity of demand: definition or formula value will be positive • use of information provided to draw conclusion (reference to first paragraph, Extract 2): a fall in the price of gas will lead to a fall in the demand for solar energy and nuclear energy.	**(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
(c) continued	**Evaluation 4** • much will depend on relative price of gas in relation to solar and nuclear energy • recognition that there will be a time lag before any impact on market for other forms of energy because supply very price inelastic • investors will want to be certain that change in relative prices is long term • impact may be limited due to the rising demand for global energy	**(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 4, Application 4, Analysis 8, Evaluation 9** Microeconomic effects: • on price of gas to consumers – impact on consumers' surplus • on price of gas to producers – impact on producers' surplus • implications for producers of other forms of energy • external costs – on environment and water supply Macroeconomic effects: • on investment – multiplier effect on GDP so promoting economic growth • on employment – an estimate that 35 000 jobs will be created • balance of payments on current account e.g. competitiveness may increase if fracking results in lower energy prices leading to an improvement in exports. Also, less need to import energy from abroad • rate of inflation may fall – lower energy prices Possible evaluation points include: • Impact on price of energy may be less significant than in the USA • Impact on other forms of energy – much will depend on how much gas is obtained from fracking • Difficult to forecast the magnitude of external costs or to place a monetary value on them • Impact on macroeconomic variables (growth, employment, balance of payments) dependent on amount of gas found, the price at which it sells, changes in prices of other forms of energy	**(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.

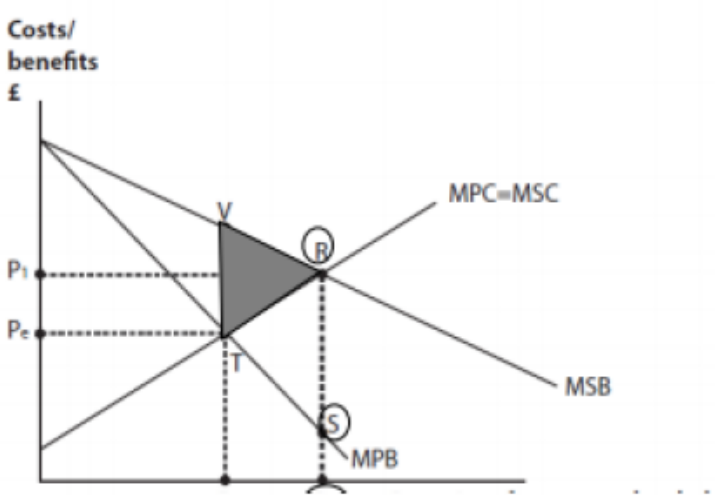
Evaluation		
Level	Marks	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of evaluative comments without explanation.
Level 2	4–6	Evaluative comments with limited explanations. Evidence of evaluation of alternative approaches which is generic or unbalanced leading to limited judgements.
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** Microeconomic effects: • impact on revenues and profits of energy companies • impact on investment decisions by firms in the energy market • impact on wages of workers in energy industries • impact on consumer real incomes and on demand for other goods and services. Macroeconomic effects: • lower costs of production • lower global rates of inflation (AD/AS analysis) • impact on global growth rates • impact on balance of payments on current account of different countries • increase in CO_2 emissions: consideration of impact on climate change on different countries, reference to external costs • impact on consumers and producers of the main countries supplying energy.	
	Possible evaluation points include: • impact on different industries will depend on their energy costs as a proportion of total costs • impact on households will depend on cost of energy in household budgets • impact on demand for other goods and services will depend on other factors e.g. state of world economy, consumer confidence, household debt • impact on inflation rates and growth rates depends on elasticities of AD and AS curves • impact on balance of payments on current account of different countries depending on whether they are net importers or net exporters of energy • impact on external costs depends on how different energy sources are affected	**(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.

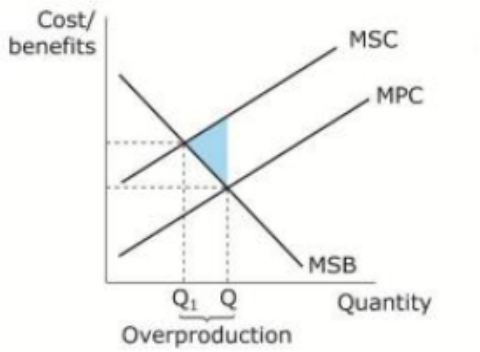
Evaluation		
Level	Marks	Descriptor
	0	No evaluative comments.
Level 1	1–3	Identification of evaluative comments without explanation.
Level 2	4–6	Evaluative comments with limited explanations. Evidence of evaluation of alternative approaches which is generic or unbalanced leading to limited judgements.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

Q9.

Question Number	Answer	Mark
(a)	**Knowledge 2, Application 2** 1 mark for the original market equilibrium where MPB = MSC (=MPC) 1 mark for correct shift from MPB to MSB 1 mark for showing the external benefit V to T 1 mark for welfare gain identified VRT 1 mark for the new equilibrium identified where MSB equals MSC (R) or (S) or Q2 Social Optimum. Diagram required e.g.  ME SO	**(4)**

Question Number	Answer	Mark
(b)	**Analysis 1** **The only correct answer is C** ***A*** *is not correct because an external benefit to a third party is not identified* ***B*** *is not correct because an external cost to a third party is not identified* ***D*** *is not correct because a private cost plus external cost to a third party is not identified*	**(1)**

Q10.

Question Number	Answer	Mark
(a)	**Knowledge 2, Application 2** 1 mark for the correct labelling of MPC, MSB and/or MPB 1 mark for correct shift from MPC to MSC, divergent or parallel 1 mark for showing the external cost at market output Q (MSC>MPC) 1 mark for the new social optimum equilibrium (Q1) identified where MSC equals MSB (Q1) or overproduction 1 mark for welfare loss/gain identified 1 mark for quantity of waste water treatment Diagram required e.g.  	**(4)**

Question Number	Answer	Mark
(b)	**Analysis 1** **The only correct answer is C** ***A*** *not correct because the fine will increase efforts by the firm to reduce illegal discharges* ***B*** *not correct because the fine will increase costs and reduce profits* ***D*** *not correct because the intervention will not result in a net welfare loss.*	**(1)**

Q11.

Question Number	Answer	Mark
(a)	**Knowledge 2, Application 2, Analysis 1** **Knowledge and analysis** Up to 3 marks for: • the meaning of externalities, e.g. effect on third party, outside the transaction, difference between social cost and private cost (1). Points might include: • use of plastic which is hard to recycle/other single use plastic arguments (1) • HFSS food can cause obesity and have third party effects (1) • more congestion/air pollution from food deliveries (1) • (positive) externality due to rise in productivity generated by cash rich, time poor professionals might allow people do impact third parties positively (1) **Application:** 2 marks for data (1+1 or 2): • 1.4 billion containers (1) or other plastic items to allow food to travel safely e.g. heat retention (1) • over-consumption / order more food (1) e.g. impact on other NHS users (1) • HFSS food (1) • falling profit margins (1) or increased competition in food delivery might mean wages fall so fewer wider macro benefits (1) • don't even have to get up/lack of exercise of consumers ordering from their sofa (1) **NB 2 marks may be awarded for a diagram** e.g. a negative externalities in production of food that has to be delivered	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 2, Analysis 2, Evaluation 2** **Knowledge/implicit understanding:** (1+1) marks e.g. • demand is price inelastic means that the percentage change in price causes a smaller percentage change in quantity demanded • demand is income elastic means that percentage change in income causes a greater percentage change in demand **Application:** (1+1 or 2) e.g. • food delivery firms' charge of £5 is a very small percentage of consumer income so they might be seen as essential or basic goods (Ext B line 5) • three dominant firms Just Eat, Uber Eats and Deliveroo (Ext B line2) • The food delivery industry has boomed in recent years (Ext B line 2) • cash rich, time poor (Ext B line 7) • income growth prior to 2020 meant delivery has boomed • HFSS addiction/habit forming • Convenient mobile app, so PED inelastic • 5 times more expensive than cooking at home **Analysis:** (1+1) development of each type of elasticity, e.g. • if demand is price inelastic then **revenue** will rise for the firm when it raises price • habit forming behaviour so PED inelastic • few close substitutes so PED inelastic • small part of overall consumer spending so PED inelastic • food delivery services are a very small percentage of consumer income so they might be seen as essential or basic goods • if food delivery is a luxury the demand likely to be income elastic, e.g. then the firms will benefit in times of economic growth, but lose demand in a recession • if food delivery is a treat in an economic downturn then it is an inferior good **NB up to 2 marks may be awarded for diagram(s) (1+1)**	

	Evaluation: (2 marks for any relevant point, or two points 1 +1) • the 30% of prices paid by restaurants is not seen by the consumer • depends on geographical areas e.g. rural vs urban areas. • the worldwide health crisis might have caused distortions in the data • third-party food delivery firms are inferior goods if demand rises when incomes fall • other factors affect demand apart from income, e.g., availability of substitutes (eating in restaurants is impossible in global health crisis) • discussion of normal vs inferior question e.g. compared to eating in a restaurant or cooking at home • income elastic vs. inelastic e.g. demand for third-party food delivery is price elastic for some income groups when incomes fall as it takes up a larger percentage of income	**(8)**

Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 4** Points might include: • integration includes horizontal/vertical/ conglomerate joining of firms • leads to economies of scale • increased market share • removal of competition • increased monopoly power • international rivals can avoid taxes • prices higher for consumers • reduced choice for restaurants and consumers • monopsony power over restaurants • technical advantages of vertical integration • vertical power over firms can leave other firms with high barriers to entry • Just Eat has bought out rivals e.g. merger between Just Eat and Takeaway.com • Amazon has partially bought Deliveroo (16% so far) which may have saved it, and/or improved it on the tech side **NB effects might include more than one types of economies of scale, or other combined analysis. Award diagrammatic analysis e.g. economies of scale LRAC**	**(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
(c) continued	**Evaluation 4** • mergers might be necessary to ensure the survival of firms (e.g. Deliveroo case) • further mergers might be limited by the CMA • supernormal profits might lead to lower prices, better technology and/or a more consumer-led market • prices may fall due to fall in average costs due to e.g. economies of scale • diseconomies of scale	**(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** Microeconomic effects of depreciation may include: • higher cost of imports of food and therefore higher cost of production for hospitality sector • lower profits for firms in hospitality • higher prices of food for consumers • consumers have lower standards of living if they are on fixed incomes/ • falling real incomes so demand for restaurant meals and food delivery services might shift left • workers have higher incomes if working in exporting firms in other industries, so might use more delivery services • restaurants might begin to use more locally produced food Macroeconomic effects of depreciation may include: • capital in-flows, e.g. benefits to multinational firms such as Just Eat for investment in the US using other currencies/ AD and/or LRAS shift out • cost push inflation/SRAS shifts in • more injections and fewer withdrawals leading to rise in AD and multiplier effect • increased employment • incentive to use transfer pricing • UK tourism might be boosted by depreciation which would improve local restaurants **NB for a Level 4 response there must be micro and macro effects and use of data with reference to restaurants or other food delivery services. Higher costs, changes in competitiveness, environmental changes could be seen as micro or macro, for example, can be used as either micro or macroeconomics.** **NB Effects in KAA could be used as evaluation and vice-versa.**	**(25)**

	9 marks for evaluation – points might include: • depends on the nature of the restaurant. Some try to use locally sourced ingredients • the pound has recovered significantly since 2016 • food costs are a small cost relative to other costs, e.g. rent and delivery • some restaurants are specialised in UK food so cost effect very low • other factors are more important, e.g. the heavy fiscal spending in response to the global health crisis • other factors determining capital inflows • relative depreciation or trade weighting of other currencies • offsetting costs with altering portion sizes or changing menu options • impact on tourism small relative to the increase in the production of food • regional differences with the UK e.g. whether there is a local food supply option • Marshall Lerner • J-curve	

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 minimum wage Microeconomic effects may include: • rise in wages will benefit very low paid workers. Might be shown on increasing NMW diagram • effect on cost to firms e.g. reduced profit margins. Might be shown on a cost and revenue diagram. • excess supply of hospitality workers • effect on prices consumer surplus falls, output falls, price increases • impact on quantity of labour demanded/contraction of labour demand • impact on productivity • inefficient resource allocation due to distortion of price mechanism Macroeconomic effects may include: • income equality improvements – may use Gini/Lorenz • prices rise – inflationary effects • reduction in relative poverty • AD: increase in consumption as incomes increase/fall in investment as profits fall • SRAS: cost-push • LRAS: if investment falls, then LRAS shifts in • reduced employment • higher income tax revenue • lower unemployment related benefits **NB for a Level 4 response there must be micro and macro effect (s) and use of data with reference to restaurants or other food delivery services. Employment or welfare issues could be seen as micro or macro, for example, can be used as either micro or macroeconomics.** **NB Effects in KAA could be used as evaluation and vice-versa.**	**(25)**

	9 marks for evaluation – points might include: • effect on firms depends on how much wage costs are as a proportion of overall costs • impact on real output depends on level of spare capacity/elasticity of LRAS/magnitude of multiplier • 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 food delivery firm market as a whole • consumers might also have increases in wages so profits might not fall • 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 • LRAS might rise as economically inactive workers enter labour force to look for jobs • higher tax revenue may not occur if unemployment increases or investment decreases • higher unemployment related benefits if unemployment increase • productivity/motivation arguments	

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.

Q12.

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)**

Mark Scheme

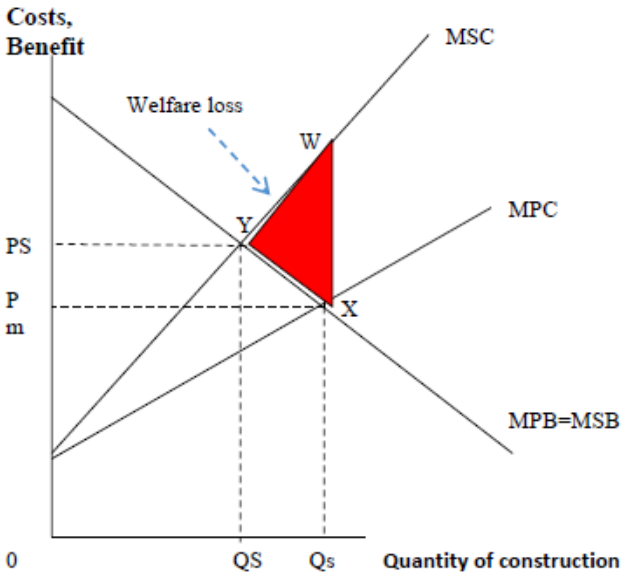
Q1.

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

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 1, Analysis 1** **Knowledge/understanding:** 1 mark for defining what a permit scheme is, e.g. a tradable permit scheme is where firms are given permits which give them a limit to the amount of pollution they emit (1) 1 mark for understanding the process, e.g. if they emit more than permitted then they can trade them with firms who have excess permits (1) **Application:** 1 mark for impact. This creates a profit incentive for firms to reduce pollution (1) **Analysis:** 1 marks for linked development linked to process, e.g. as firms may have excess permits they can sell to add to the firm's revenue (1).	**(4)**

Q2.

Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 8, Evaluation 9 • Understanding of private costs and external costs (may be implicit). • Explanation of private costs in nuclear power station: purchase of land, machinery, construction of buildings, labour costs, security costs, raw materials. • Explanation of external costs: visual eyesore, impact on wildlife, impact on local property prices, air pollution, road congestion, risk of leak or contamination. • Diagram depicting private costs and external costs	

	 ➢ Original MPB / MSB and MPC curves ➢ MSC curve (accept a parallel shift of the MSC curve) ➢ Identification of market equilibrium and socially efficient quantity ➢ Identification of triangle of welfare loss **NB: For a Level 4 response, candidates must include an accurate diagram and consideration of both private and external costs.**	**(25)**

	Costs also include: • Risk from major nuclear plant failure. • Imperfect market knowledge: risk from incomplete technology for developing the nuclear reactor. • Risk from foreign ownership and control of major nuclear power station (funded and built by French and Chinese companies). • High price of electricity consumers will pay – above the market price. • Accept macro point e.g. long term income outflow on the balance of payments. **Evaluation** • Difficulty in measuring and attaching a monetary value to private costs and external costs. • Time lag in building plant – at least 10 years. • Government intervention may reduce size of external costs e.g. construction noise abatement measure. • Risk of government failure; some argue it could not withdraw from the Hinkley Point project without major loss of trade with China. • Accept macro point e.g. short and long run effects on the balance of payments.	

	Significant private and external benefits from the project which offset costs and/or reduce welfare loss, may include: • Employment and income creation / positive multiplier effects at local, national and international level / French and Chinese firms view it as a first step to securing further contracts from around the world. • Increased security of energy supply for the future – some 7% of UK electricity for sixty years / given the closure of many coal power stations. • Diversify UK energy production and so spread risks from uncertainty on non-renewable sources such as wind power and solar power. • Stable price of electricity for consumers for next sixty years. • Less damage to the environment / nuclear energy has low carbon emissions / easier for government to achieve internationally agreed carbon emission targets. • Extremely tight safety regulations to be imposed on the building and operation of the nuclear power station / one of the greatest safety regulations in the world.	

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 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	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.

Q3.

Question Number	Answer	Mark
(a)	**Knowledge 1, Application 1, Analysis 1** Positive statements are value free/ based on facts/ can be verified and/or Normative statements contain value judgements/ not based on facts/ cannot be supported with evidence (1) The reference to 'should' in the statement suggests it is normative as this is a person's value judgement or vaccination can be good for an entire population (1) The idea that those who are not vaccinated will benefit is a positive statement as evidence will exist that shows others will benefit from others being vaccinated or if enough of its members are vaccinated, even those who are not will receive a measure of protection (1)	**(3)**

Question Number	Answer	Mark
(b)	**The only correct answer is C** ***A*** *is not correct because this is government failure* ***B*** *is not correct because this is the incentive function of the price mechanism* ***D*** *is not correct because this is the rationing function of the price mechanism* **(1)**	

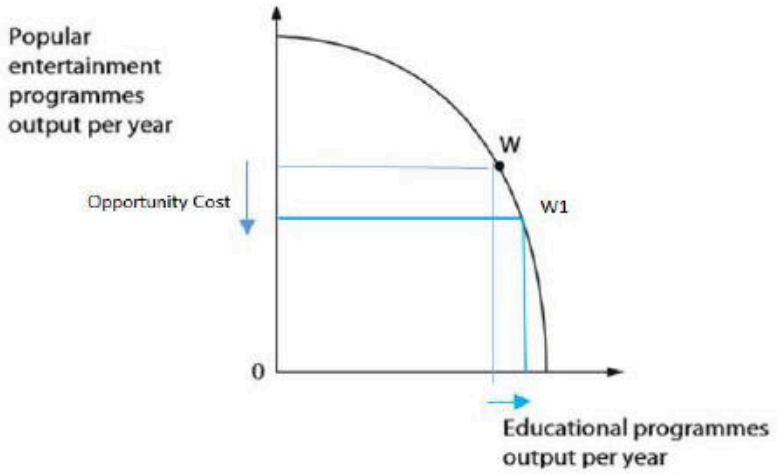
Q4.

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)**	

Q5.

Question Number	Answer	Mark
(a)	**Knowledge 1** **Knowledge/understanding** 1 mark for definition, e.g. • Measure of the welfare (utility) that people gain from consuming goods and services • Difference between the total amount that consumers are willing and able to pay and the total amount that they actually pay. • Diagram showing area under the demand curve and above the market equilibrium price.	**(1)**

Question Number	Answer	Mark
(b)	**Application 2** **Application** 2 marks for, e.g. An additional point to the right of W indicating movement of resources towards educational programmes (1) and the resulting opportunity cost, showing a fall in output of popular entertainment programmes (1). The following diagram earns 2 marks:  	**(2)**

Question Number	Answer	Mark
(c)	**The only correct answer is C** ***A*** *is not correct because this is providing an example of government finances rather than being non-excludable or non-rivalrous as a definition of a public good.* ***B*** *is not correct because this is confusing popularity with public goods, rather than being non-excludable or non-rivalrous as a definition of a public good.* ***D*** *is not correct because this is confusing benefits to third parties as members of the public rather than being non-excludable or non-rivalrous as a definition of a public good.*	**(1)**

Q6.

Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 8, Evaluation 9 • Definition of microeconomic consequences • Identification of positive XED Positive consequences • Consequences for microeconomic agents of increased demand for electricity – consumers, electric vehicle manufacturers, electric vehicle dealers, battery manufacturers, freight companies, retailers, government, employees. • Use of cost and revenue diagram for to show the effect on profit of falling cost of electric powered vehicles/rising revenue. • Welfare effects on consumer and producer surplus of consumers switching to electric powered vehicles. • Efficiency – allocative, productive, dynamic • Positive external benefits • Reduced negative external costs (MSC>MPC) closer to social optimum Negative consequences • Use of cost and revenue diagram to show the effect on profit of rising cost of petrol or diesel/declining revenue (D=AR). • Welfare effects on consumer and producer surplus of consumers switching away from diesel or petrol. • Efficiency – x-inefficiency • Loss of government revenue as a large proportion of petrol or diesel price is tax • Negative external costs associated with e car manufacturing **NB: Negative consequences can be seen as KAA and positive consequences against as evaluation or vice versa.**	

	Evaluation • Predictions may be wrong – dynamic market forces between substitutes may result in cheaper sources of oil, electric power becoming more expensive. Lack of electric infrastructure. Distant substitutes, XED<+1. • Counterarguments made to the point raised e.g. Supernormal profits made may raise barriers to entry, firms may pursue sales maximisation rather than profit maximisation, congestion. • Information gaps • Different geographic markets – regulations and taxes on oil powered vehicles • Impact on the oil market will depend on how electricity is generated • Negative external costs partly offset by increased demand for electricity **NB: Negative consequences can be seen as KAA and positive consequences against as evaluation or vice versa.**	**(25)**

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 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	**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.

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.

Q7.

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)**

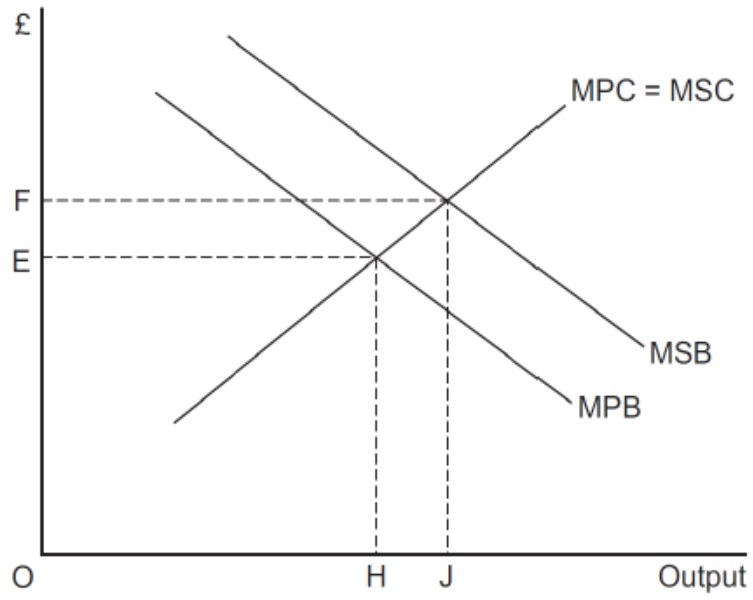
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	**1–2**	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	**3–4**	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative 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:  	

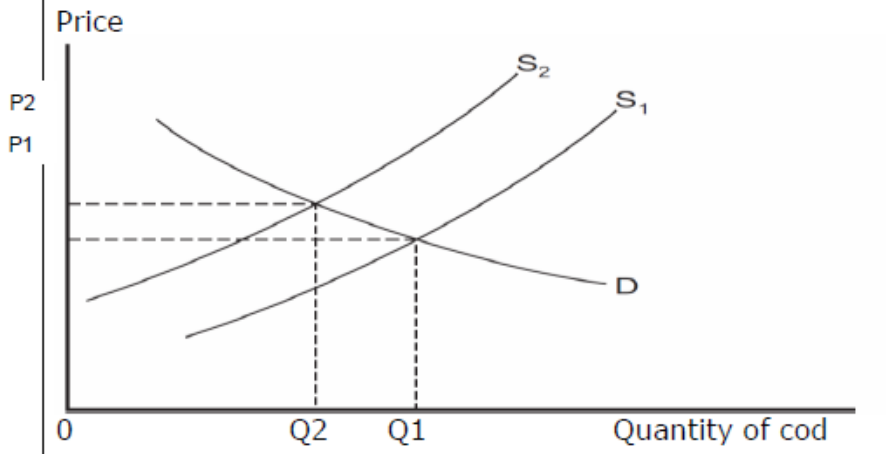
	• The diagram below shows the marginal private benefit (MPB) and marginal social benefit (MSB) curves and the marginal private cost (MPC) and marginal social cost (MSC) curves for higher education • The external benefits of education are social benefits that spillover to benefit others in the society 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.

Q8.

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)**

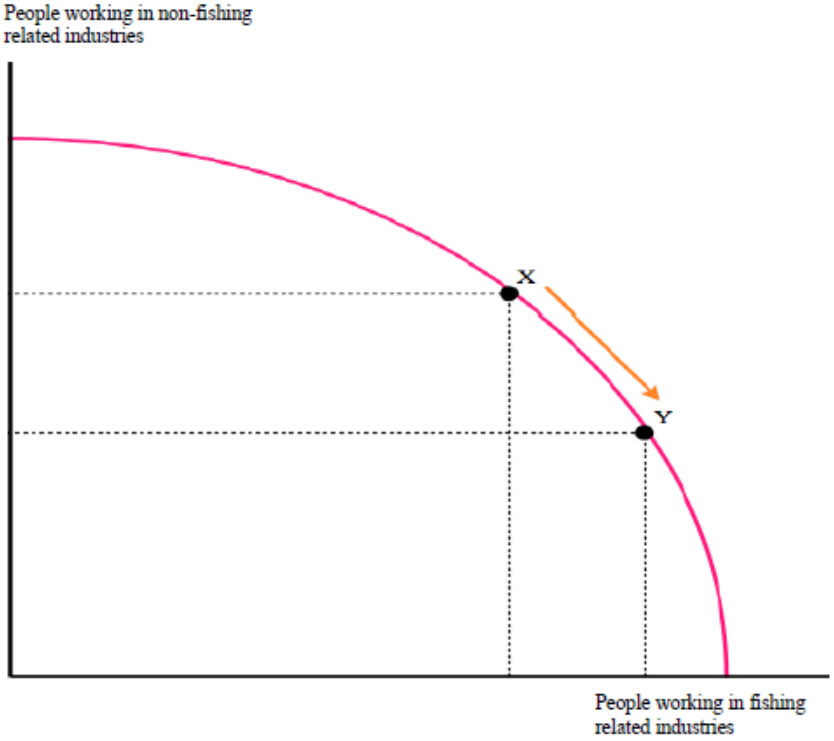
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 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.
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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.
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.

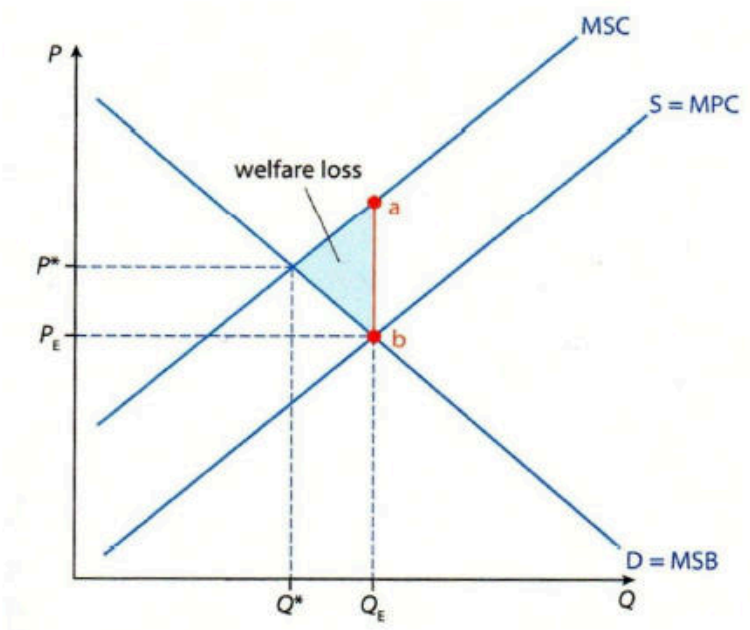
Question Number	Indicative content	Mark
(f)	**Knowledge 4, Application 4, Analysis 6** Overfishing is a negative externality in production. Diagram e.g.  **NB If there is no appropriate diagram - maximum level 3 KAA**	

	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)**

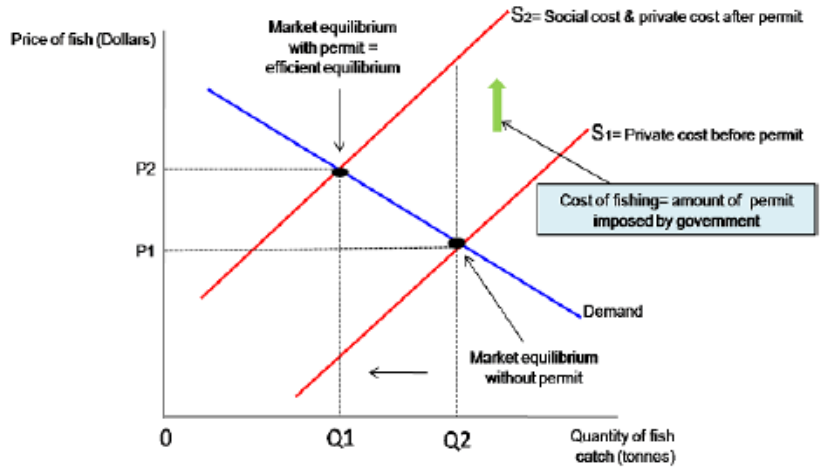
	on those swimming in the sea or wildlife, clear up for Environment Agency etc • Fishing industry throws any over catch back in to the sea, this can pollute the water • Smell from fishing industry can have a negative impact on those that live near the ports • Overfishing increases supply - lowers price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

Q9.

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)**

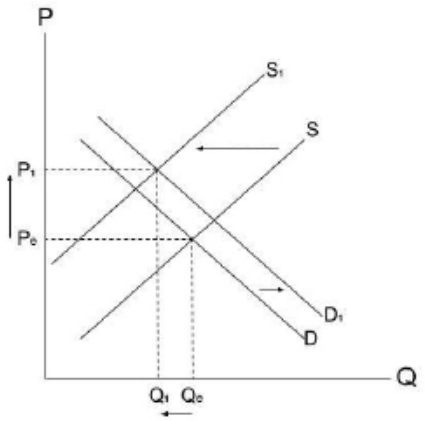
Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 2** • Knowledge – public goods are non-excludable and non-rivalrous • Application - Extract C suggests public parks exhibit these features Reasons why they are public goods • 'free use' i.e. do not have to pay to enter • '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
	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** • 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.
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** 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.

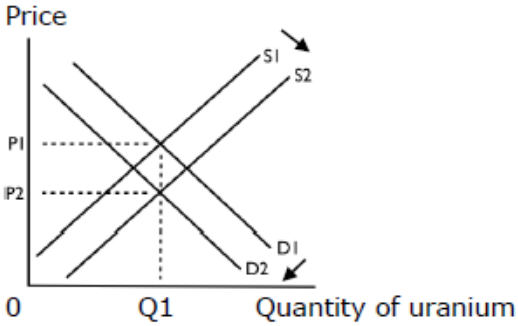
Question Number	Indicative content	Mark
(g)	**Knowledge 4, Application 4, Analysis 6** Distinction between free market, mixed and command economies: reference to Adam Smith, Friedrich Hayek and Karl Marx Disadvantages of free market approach: • Free market under provision of health services, with large 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.

Q10.

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)**

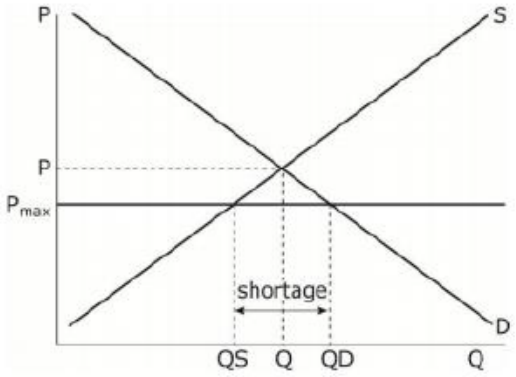
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level 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)**

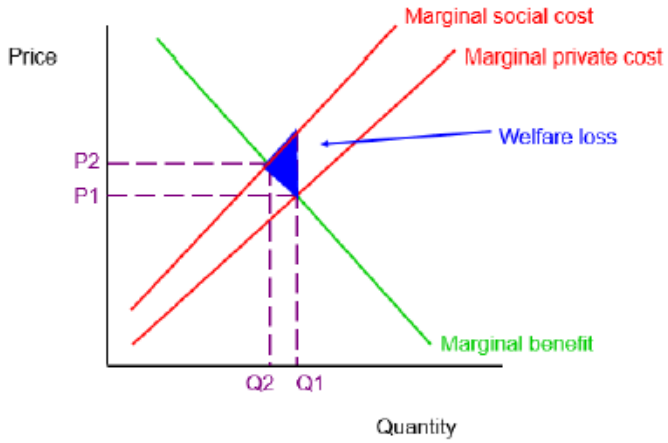
Question Number	Indicative content	Mark
(e)	**Knowledge 3, Application 3, Analysis 3** • Understanding of maximum price.  The effect of a maximum price on consumers: • Energy prices more affordable for consumers, end of 'decade of rising energy bills', extension in demand for energy or increase in quantity 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.

Q11.

Question Number		Mark
(a)	**Knowledge 2, Application 2, Analysis 1** **Knowledge/understanding and analysis:** Oligopoly (1) OR Legal monopoly (1) OR Monopoly only if monopoly POWER is implied e.g. using CR calculation (1) OR Duopoly only if duopoly POWER is implied e.g. using CR calculation (1) AND Understanding of market structure identified, e.g. a market *dominated by* a few firms, or *interdependent* (1) Explanation of the process linking to the market structure to the action of firms e.g. high concentration means that firms may exhibit collusion, price rigidity, use of non-price competition, profits are not competed away (1)	

	Application (1+1): 2 marks for data references from Figure 1 and other sources (at least 1 mark must be related to Figure 1) e.g. Others 29% • Concentration ratio calculation e.g. 2 firm CR is 44% 3 firm CR is 53% 4 firm CR is 60% 5 firm CR is 66% 6 firm CR is 71% (2) • Costa (31%) is >25% market share (2) • Strong brand names, brand logos e.g. Caffè Nero and Costa (1) have been dominating the UK market Fig. 1/Extract A (1) • Market power is likely to be high (1) with reason e.g. consumer loyalty (1) shown in Figure 3 as price differences tolerates/illustrate market power (1) coffee has price inelastic demand (1) so people are prepared to pay more (1)	**(5)**

Question Number	Indicative content	Mark
(b)	**Knowledge 2, Application 2, Analysis 4** **Pricing strategies** - must be linked to ***profit***, and may include: • Price leadership/price matching – some brands seem very similar in pricing e.g. use kinked demand theory • Predatory pricing • Limit pricing (with view to higher future profits) • Price wars (with view to higher future profits) • Collusion/collaboration - reward the use of game theory/pay off matrix to support this • Undercutting close rival e.g. Costa (with view to higher profits) • Also award, if linked to profit: sales max, exploiting economies of scale, cost cutting, or competitive pricing linked to elastic demand, price rises and/or price discrimination	

	Non-pricing strategies – linked to ***profit***, might include: • Loyalty schemes, e.g. Starbucks only allow its own cup for reuse in store, • Paying for central and expensive locations for stores • Opening up new stores near to competitors to undermine the competition, e.g. at a London location there are many competitors • Closing down non-profitable stores as rationalisation policy • Strengthening the brand by advertising • improving reputation for recycling washable cups/fair trade coffee, sharing with other brands not just Starbucks coffee cups which can be washed in store and re-used • Extension of product range • Focus on quality **NB Award collusion and BOGOF-style approaches as either pricing or non-pricing strategies.** **NB For a Level 3 answer, there must be both price and non-price strategies, and reference to the context of *profitability* of *Starbucks*.**	**(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** • Weighing up of reasons for using price or non-price competition, e.g. • Not likely to use price competition - e.g. better to collude and keep higher joint profits. • Non-price competition can have very uncertain results/be expensive • Effects in the short run and long run might vary e.g. rising costs lead to falling profits, but long run demand rises leading to better results • Relative effectiveness of measures e.g. limit pricing may be static in long run and predatory pricing changes when other firms leave • Some of these strategies are illegal and could lead to fines, which might reduce overall profitability • Unstable nature of game theory equilibria • The effectiveness of the competition authorities might be considered e.g. regulatory capture • Depends on the strength of brand loyalty • Limitations of loyalty schemes, e.g. cost, consumer behaviour.	**(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 (1+1)** e.g. • Fall in consumption of non-renewable products (1) • Rise in tax revenues (1) • Reduction in external costs/greater environmental awareness (1) • Soft touch regulation/allows consumer choice (1) **Application (2 or 1+1)** e.g. • Use of reusable cups as a means of reducing demand for disposable cups (i.e. a substitute, Extract C) (1) • Extract B – 5p charge is a small proportion of £2.60 (1) • 85% reduction in plastic bags (1) • This might be illustrated through the use of a correct supply curve shift, e.g. a fall in consumption or production of cups on x axis (1) **Analysis (1+1)** e.g. • Indirect taxes may raise prices (1) • Increases in costs of production (1) • Link between unit tax, tax revenue and reduction in demand for cups (1) • A supply and demand diagram showing an indirect tax (supply shift upwards/leftwards) or an externalities diagram might be used (1) • tax revenue could be used to subsidise other products, e.g. recyclable cups (1)	

	Evaluation (2 marks for any relevant point or 1+1). Points might include: • It depends if the tax is passed on to the consumer • Other policies may be considered e.g. new recycling specialist facilities, regulation • PED might be used, e.g. a 5p tax on the price of a £2.60 coffee might have very little effect on demand, or, a cup of coffee may be a small percentage of consumer income, depends on the availability of substitutes • Regressive nature of the tax – has a greater effect on lower incomes • Other approaches considered, e.g. subsidising reusable cups as in Ext B changing the technology in the recycling **NB award two advantages. A diagram can be credited as analysis or application (1+1) up to 2 marks in total.**	**(8)**

Question Number	Indicative content	Mark
(d)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** **Microeconomic influences may include:** • Level of demand or expected demand, prospect for profit • Cost of labour, minimum wage, spare capacity in the labour market • Rent/land prices • Contestability of market/barriers to entry e.g. how long and it takes and ease of setting up business • Legal system and other legislative issues • Property rights • Extent of regulation • Existing PED • Brand loyalty • Sunk costs **Macroeconomic influences may include:** • Levels of competitiveness e.g. price and non-price, which might relate to competitiveness ranking, e.g. infrastructure, human capital, institutions • Macroeconomic environment, e.g. inflation • Membership of EU or other trade bloc issues • Value of currency • Level of corporation tax. • Transfer pricing possibility, as outlined in Extract A, as impact on profitability (not costs) • Level/rate of national income/economic growth and spare capacity/unemployment • Growth of household incomes in different countries, e.g. Chinese coffee shops are the most profitable, growing quickly in number • Strength and stability of local economy • Political and social stability	
	NB competitiveness, corporation tax, incomes, unemployment and contestability can be seen as a micro or macro approach. • Possible evaluation points include: • Factors might balance each other out • Changes in tax rates, e.g. government cutting corporation tax significantly • Starbucks is starting to report UK profits – perhaps it has had too much negative publicity from the low profit tax paid, Extract A reduction by a third in sales at Starbucks. Also it is moving headquarters from Netherlands to UK • Different influences affect different firms	**(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 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	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 covering both microeconomic and macroeconomic factors. 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.

Question Number	Indicative content	Mark
(e)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** **Microeconomic effects may include:** • Effects on consumers – e.g. higher prices (or lower prices if increased competition), more consumer spending on high street. Might include PED, YED (this might be developed as evaluation) • Effect on workers – higher incomes, more jobs • Effect on firms, e.g. increase in profits, revenue/decrease for independent non-branded coffee shops; cost of employing specific skilled workers e.g. baristas or other factors of production • Increase negative externalities e.g. more coffee cups • External economies of scale e.g. ancillary services such as cup manufacturers **Macroeconomic effects may include:** • Increased employment in service industry • Balance of payments e.g. outflow of profits to Starbucks • Effects on primary product producers • AD increase, negative/positive multiplier effects (local businesses might lose out to branded supermarket coffee outlets), inflation/growth • Tax implications e.g. transfer pricing • Income inequality • Environmental impacts	

	NB environmental impacts, labour markets, taxation or incomes can be seen as a micro or macro approach. **Evaluation points may include:** • Extent of negative externalities depends on whether new processing plants for cups are set up/how alternatives are produced. • Depends on the extent of the increase in demand, PED, YED, XED – and if other areas are seeing declines. • Depends on the size of the multiplier • Depends on the level of spare capacity (LRAS for example) • Depends on growth levels, point at which AD and AS meet (if Keynesian approach) • Depends on the performance of other firms • Depends on the extent to which local shops are displaced • Depends on the extent to which substitution can occur – e.g. people drink coffee instead of going to pubs • Depends on degree of profit repatriation, remittances, transfer pricing • Depends on whether coffee shops extends consumption spending or replaces demand for something else which might have different benefits/costs	**(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 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	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 covering both microeconomic and macroeconomic factors. 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.

Q12.

Question Number	Answer	Mark
(a)	**Knowledge 2, Application 2, Analysis 1** **NB an answer which sees highly concentrated as having a large number of firms will not earn knowledge or analysis marks** **Knowledge and analysis:** 3 marks for e.g. • Identification of **high** concentration - high market share of some firms (1) few large firms dominate (1) uncompetitive (1) • Identification of market structure - there is a *legal* monopoly (Walkers) **OR** oligopoly **OR** duopoly (1) • Firms can set prices (1) control output (1) / monopoly power (1) • Interdependent (1) • High barriers to entry/exit (1) low contestability (1) **Application:** 2 marks for data references e.g. • Walkers have over 50% of market share (1) • Use of concentration ratio e.g. 2 firm CR 78.0% (2), 3 firm CR 82.2% (2) • Extract A refers to ban making market more competitive (1) implying prices are currently uncompetitive/high (1) • Extract A – high levels of advertising (1) • common features: they tend to be dominated by a small number of firms that sell multiple brands and that heavily advertise their products (1) **NB Concentration ratio calculation can be awarded as analysis or application** **Award a maximum of 1 application mark if there is no reference to Figure 1 or Extract A**	**(5)**

Question Number	Answer	Mark
(b)	**Knowledge 2, Application 2, Analysis 2, Evaluation 2** **Knowledge/ implicit understanding: (1+1)** marks for reason e.g. • Educational/skills/wage differences • Changing patterns of trade/globalisation • Government policy/austerity/universal credit • Income generated from inheritance • Payments generated from debt • Race, gender, age, geographical issues • Changes in direct tax • Stage of the economic cycle/Financial Crisis 2008 • House prices (must relate to income not wealth) • Weakened power of trade unions • Level of unemployment/underemployment • Irrational behaviour/information gaps/myopia **Application (1+1 or 2):** • Any valid application to **causing inequality** in the UK or other developed country, e.g. unaffordable house prices in the UK mean the younger generation has little income after rent (1); cut in the top rate of income tax, rise in NICs, change in tax thresholds; university fees at £9250 a year is widening the income gap if fewer low income households go to university (1); pensions rising below average incomes (1); educational differences such as an economics degree has a higher impact on future earnings than other degrees (1)	

	Analysis (1+1): • Linked development of the **two** points made **Evaluation (1+1 or 2)**. Points might include discussion of: • The role of transfer payments/minimum wages in narrowing/failing to narrow inequality • Changes rather than levels of income inequality, absolute vs relative issues • Relationship with wealth e.g. as a more significant inequality issue • Relative significance of different factors e.g. direct taxes more proportional than indirect taxes (regressive) • Time lags e.g. education has effects as yet unfolded, government policy might change, Brexit has not yet happened. **NB Do not allow indirect taxes or subsidies as KAA** **NB Use of Gini coefficient or Lorenz curves could be used as application or analysis**	**(8)**

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Question Number	Indicative content	Mark
(c)	**Knowledge 2, Application 2, Analysis 4** • Firms are interdependent so they will respond in the face of what other firms might do • Firms may not reach the same outcome as if they operated alone • Firms are cutting prices because they want to expand market share/steal other firms' markets • All firms responding in this way means that firms make less profit overall • Effects of advertising ban may make market more contestable, with possible effects on entrant • Price cuts could be a form of limit pricing, i.e. reducing contestability (effects on possible entrants may be shown) • **Game theory** e.g. a payoff matrix or kinked demand curve to illustrate behaviour, for example cartel-like or collusive behaviour, price leadership **NB to access Level 3 there must be correct use of game theory and application to the data.**	**(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.

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Question Number	Indicative content	Mark
(c) continued	**Evaluation 4** • Firms such as Walkers have significant market share and brand loyalty, even if competition lower price they may not switch • Use of context to show that firms are cutting prices because of a regulation and not because of the actions of other firms. No sign of interdependence. • Size of market shrinking overall so behaviour more aggressive • Firms setting low prices in a long run equilibrium might not the best option for the firms or other stakeholders. • Advertising ban affects children mainly - so price competition less needed for older target audiences that can still be targeted. • Reference to only 10% loss in sales compared to 15% - still a large impact on firms (Extract A).	**(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.

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Question Number	Indicative content	Mark
(d)	**Knowledge 4, Application 4, Analysis 8, Evaluation 9** 16 marks for KAA, for effects of increased spending on education to promote heathy eating in the UK. Microeconomic effects may include: • Effects of increased demand for healthy foods/consumer surplus/increased prices (may include supply and demand diagram) or fall in price of HFSS foods • Positive externalities in consumption are internalised (may include divergent MSB and MPB diagram and corresponding movement toward social optimum at MSB=MSC) • Impact on firms which make unhealthy products – increased costs if they diversify/reduced demand e.g. use of healthier ingredients with higher costs. This might be shown on a cost/revenue diagram. • Increased profits for healthy food producers e.g. shown on a costs/revenue diagram • labour market issues, e.g. workforce becomes healthier, and reduced obesity might make workers more productive (increase marginal product) • Opportunity cost of spending on education Macroeconomic effects may include: • Effects on price level and output as G increases, with multiplier effects. May be shown by shift out in AD with effects on price level and real output. • Healthier workforce shifts out the LRAS, with impact of lower prices and higher output • Fiscal implications – crowding out, effect on balancing budget	

	NB for a Level 4 response there must be micro and macro effect (s). Opportunity cost/shift in PPF/labour markets/competitiveness etc. can be used as micro or macro. 9 marks for evaluation – questioning might include: • Expansionary fiscal policies not necessarily happening. It might mean expenditure elsewhere is cut (opportunity cost arguments) • Trade-off between objectives e.g. increased spending might cause inflation, depends on the state of the fiscal balance, multiplier etc. • Questioning whether education is effective, or whether other policies are needed, e.g. tax, banning advertisements • Education might be counter-productive/role of state might be questioned e.g. government failure, crowding out effect	**(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 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	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 covering both microeconomic and macroeconomic factors. 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.

Question Number	Indicative content	Mark
(e)	**Knowledge 4, Application 4, Analysis 8 Evaluation 9** 16 marks for KAA, for effects of increase in tax on HFSS foods. Microeconomic effects may include: • Rational economics implies people will change consumption patterns. Consumer preferences will change away from HFSS foods e.g. as consumers switched to cheaper brands and crossed the border to Sweden and Germany to do their shopping (Extract C). • An ad valorem or specific tax diagram might be used to illustrate the effects on prices/quantity in each market, and the incidence of tax • Cross elasticity of demand – evidence (e.g. Extract C) that a rise in price may cause a rise in demand for healthy food. • Welfare changes, e.g. loss of consumer, producer surplus/higher prices and deadweight welfare loss. This might be shown with an externalities diagram, e.g. positive in consumption of healthier foods. • Impact on firms, e.g. loss in profits on HFSS as costs rise/demand falls. This might be illustrated using a costs/revenue diagram; increased profits for healthier options. • Impact on labour market. Healthier workers, or effects of cut in real wages as costs of living increase. Changing employment opportunities. e.g. reduced employment for HFSS manufacturers and increased employment for healthy foods firms.	

	Macroeconomic effects may include: • Redistribution (micro or macro issue): indirect taxes of this sort are regressive, disproportionately affecting the elderly and the poor. Taxes on HFSS foods moderate consumers, as well as the obese overeaters they are intended to target. • Cost push inflation – a one-off rise in prices. This might be shown by an upwards/leftwards movement of AS • Effects on incomes/net exports – may be linked to a fall in AD, e.g. in Denmark the policy helped push up food prices in a year in which real wages fell by 0.8%. • Governments might gain revenue which can be used elsewhere in the economy / lose revenue – Laffer curve (Extract C) **NB for a Level 4 response there must be micro and macro effect (s). Opportunity cost/shift in PPF/labour markets/productivity/competitiveness etc. can be**	

	used as micro or macro. Up to 9 marks for evaluation. Points might include: • Depends if firms respond by cutting prices (Extract B) • The tax makes people buy other unhealthier food (in Extract C) e.g. increases price and people may substitute to cheaper even unhealthier or low-quality alternatives that are more affordable • Tax is not an efficient deterrent to obesity. The policy had a very limited impact on the consumption of HFSS in the data foods: 80% of Danes did not change their shopping habits at all (Ext C). Not only is demand for food relatively inelastic, prices often fluctuate, and consumers become immune to changes • Depends on magnitude- the proportion of income may be low • The price elasticity of demand will determine the incidence of the tax - inelastic larger consumer incidence and elastic larger producer incidence. • Depends on how funds are used - e.g. to promote healthy eating through subsidies and education • The intervention may mean free markets work less well – theory of unintended consequences • Other unintended consequences e.g. counterfeit, smuggling	**(25)**

Knowledge, application and analysis		
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