

Extract B

What is the true cost of the food delivery service?

The food delivery industry has boomed in recent years. Just Eat, Uber Eats and Deliveroo all offer very similar services – third-party food delivery firms that take up to 30% of the price of restaurant meals and deliver them to customers within a certain radius. The average spend per customer is around £15 with a £5 delivery fee, about five times more expensive than cooking at home and the same price as eating in the restaurant. Cash rich, time poor professionals increasingly turn to food delivery. 5

Food delivery comes with many layers of packaging. In the UK, there are 200 million meals annually with around 1.4 billion individual pieces of plastic for heat retention and protection when travelling, but does it really have to be plastic? People tend to order more food, often high in fat, sugar and salt, and don't even have to get up from their sofa. 10

But there are concerns that the delivery firms are exploiting employees who have no alternative. There is an issue of low pay and informal contracts. Delivery drivers are classed as 'independent contractors', and therefore not subject to some employment rights including a guaranteed minimum wage, sick pay, pensions or holiday pay. Drivers are paid either a flat hourly rate, or a fee per delivery. Factors such as delivery distance, speed, how busy it is and whether there are multiple drop-offs are all factored into how much a driver is paid. Deliveroo says its wages amount to around £10 per hour, but drivers say that during 2020 their pay has been as low as £1 per hour. Drivers are not paid extra for petrol or to maintain their vehicles. Many drivers are recent immigrants or students, who do not have property or savings to fall back on. 15 20

The government could address this with widening minimum pay legislation to contracted workers, by setting codes of practice, or by setting recommended wage targets. Furthermore, there are health and safety issues for workers. Vehicle safety checks, length of shifts and safety equipment are of concern. However, there are still people who take benefit from working flexibility. 25

(Source: adapted from <https://www.theguardian.com/australia-news/2020/oct/25/home-food-delivery-what-is-the-most-ethical-way-to-order-in> and https://digitalcommons.molloy.edu/cgi/viewcontent.cgi?article=1043&context=bus_fac)

Extract C

Integration in the third-party food delivery industry

The Competition and Markets Authority (CMA) is watching carefully to prevent any one firm having complete control of the food delivery industry. Just Eat, the market leader, agreed to merge with successful Dutch firm Takeaway.com in 2020, creating a new European leader by revenues. It also bought Grubhub in the US, with 20 million active users. Just Eat uses an aggressive pricing strategy, undercutting delivery fees below the average cost of other firms in the market, that will force them to merge in order to gain some economies of scale. 5

Amazon, having failed with its own delivery company Amazon Restaurants in 2018, has bought 16% of Deliveroo. The CMA took over a year to agree to the partial integration, on the argument that Deliveroo would close down without external investment. Amazon has unique expertise in marketing, increasing customer share and, most importantly, efficiency in delivering things. Food delivery is often uneconomical because a single household puts in a single order from a single restaurant at any one time. Tech companies such as Amazon can improve the business: once a meal has been ordered, an app often moves that restaurant to the top of the rankings for that neighbourhood, in the hope of getting a second and third delivery. 10 15

So why do restaurants turn to these delivery firms? The sheer volume of customers these delivery firms can hold makes it a difficult deal to turn down. But resentment from small business restaurant owners, angry at being wholly dependent on tech companies, is growing. Most restaurants would prefer that customers come in and pick up their orders themselves because they do not have to pay the 30% commission. Restaurant profit margins are small, and the effects of a 20% fall in the external value of the pound since 2016 on food costs are significant, given that over half of their food and drink is sourced outside the UK. 20 25

(Source: adapted from <https://www.ft.com/content/c20f6848-3c4b-11ea-a01a-bae547046735>
<https://www.ft.com/content/edf8a144-a101-4ef8-80e3-7d2f1565d35c>
and <https://www.thisismoney.co.uk/money/markets/article-8138703/Uber-set-sell-takeaway-division-rival-Deliveroo-two-years.html> and
<https://www.ft.com/content/c20f6848-3c4b-11ea-a01a-bae547046735> and
<https://www.ft.com/content/bed7c4d8-28c1-11ea-9a4f-963f0ec7e134> and
<https://www.economist.com/1843/2021/01/26/gulp-the-secret-economics-of-food-delivery>)

- (a) Using the information provided, explain **one** externality that arises in the food delivery market. (5)
- (b) With reference to Extract B, examine whether the demand for delivered food is price inelastic **and** income elastic. (8)
- (c) With reference to Extract C, discuss the likely effects of increasing integration within the food delivery market. (12)

EITHER

- (d) Evaluate the microeconomic and macroeconomic effects of a depreciation of the pound. Refer to restaurants or other food delivery services in your answer. (25)

OR

(e) Evaluate the microeconomic and macroeconomic effects of significant increases in the minimum wage. Refer to restaurants or other food delivery services in your answer.

(25)

(Total for question = 50 marks)

Q8.

The market for beef

Extract A

Boost to UK farmers

The horsemeat scandal of 2013 affected the demand for many processed meat products. Traces of horsemeat were discovered in products labelled as beef, manufactured by many overseas suppliers. With many beef products customers had little knowledge about where the beef came from. If the manufacturers knew, they were not always making this clear to customers.

5

As a result of the scandal, the proportion of domestically-sourced beef in British shops rose from 81% to 83% in 2013. Consequently, the prices farmers received for beef in the UK rose by 3%.

Another potential boost for UK farmers is demand from emerging markets. As the middle class grows in countries such as China, so does their demand for protein and dairy products. British meat and dairy products are seen as offering a stable and proven supply chain, unlike in China where baby milk has been found with traces of the plastic melamine. State-owned Chinese companies are approaching dairy farmers directly to secure millions of litres of UK milk.

10

(Source: 'Boom in farming as UK demands quality' by Graham Ruddick, *The Telegraph* 25th Jan 2014. <http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/10596862/Boom-in-farming-as-UK-demands-quality.html>)

(a) Explain why 'the prices farmers received for beef in the UK rose by 3%' in 2013 (Extract A, lines 7 and 8). Include a supply and demand diagram in your answer.

(5)

(b) Assess the likely impact of a 3% increase in the price of UK beef on the market for lamb.

(10)

(c) Explain **two** likely impacts on dairy farmers in the UK of the growth in the middle classes in emerging markets such as China.

(6)

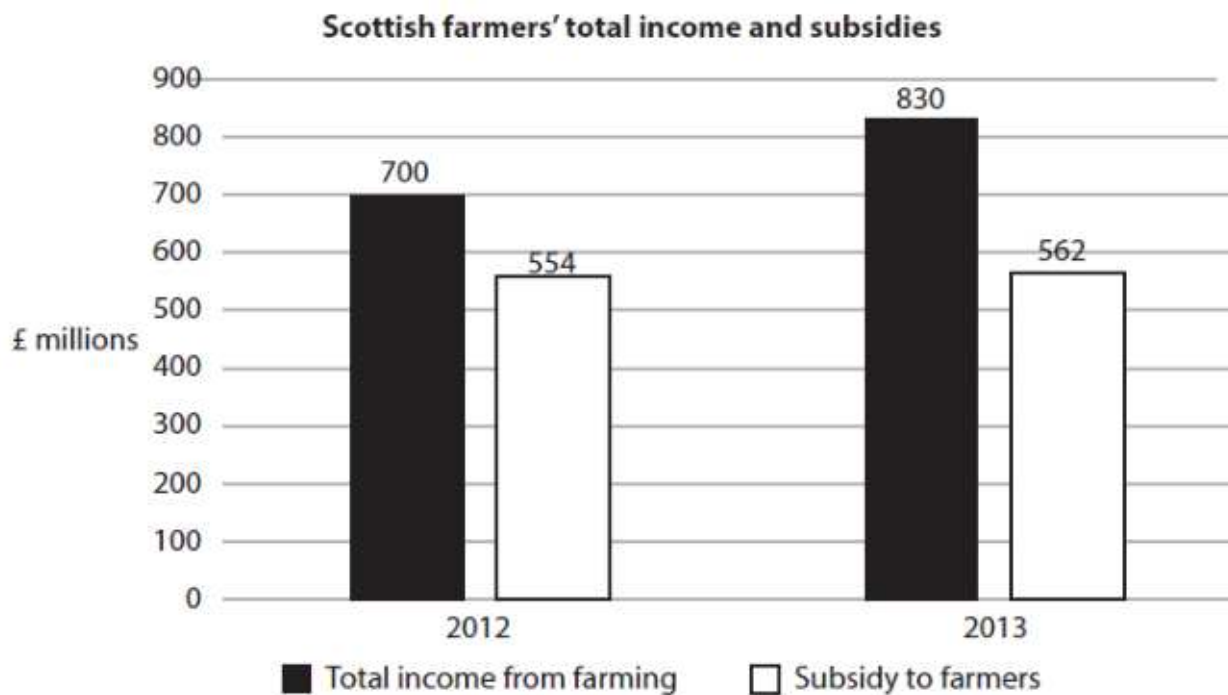


Figure 1

Total income from farming and subsidies for Scottish farms 2012 and 2013

(d) With reference to Figure 1, calculate the value of subsidies as a percentage of total Scottish farm income for 2012 and 2013. You are advised to show your working.

(4)

2012

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2013

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Extract B

Reliance on farm subsidies

There is a reliance on subsidies in Scottish farms. The argument for subsidies is that farming is vital to the rural economy and that support payments to farmers can benefit the local community. The counter argument is that farmers should make a living from the free market for what they produce.

Farm subsidies will continue in the European Union. In many of the member states, agriculture and the vast food industry that depends on it still hold significant political influence. Although farmers in the UK complain that their share of EU subsidies is already too low, changes to the EU farm subsidies due to take effect in 2015 mean they are likely to be slashed by one third to one half.

(Source: adapted from 'Even the best farmers would struggle in a free market,' *The Southern Reporter*, 6th Feb 2014, <http://www.thesouthernreporter.co.uk/opinion/columnists/even-the-best-farmers-would-struggle-in-a-free-market-1-3296583>)

(e) With reference to Figure 1, Extract B and your own knowledge, discuss the reasons for subsidies being paid to Scottish farmers.

(15)

EITHER

(f) Using the concept of external costs, evaluate the possible economic effects of increased beef production. Use an appropriate diagram in your answer.

(20)

OR

(g) Evaluate the impact of a guaranteed minimum price in the beef market on consumers and producers. Use an appropriate diagram in your answer.

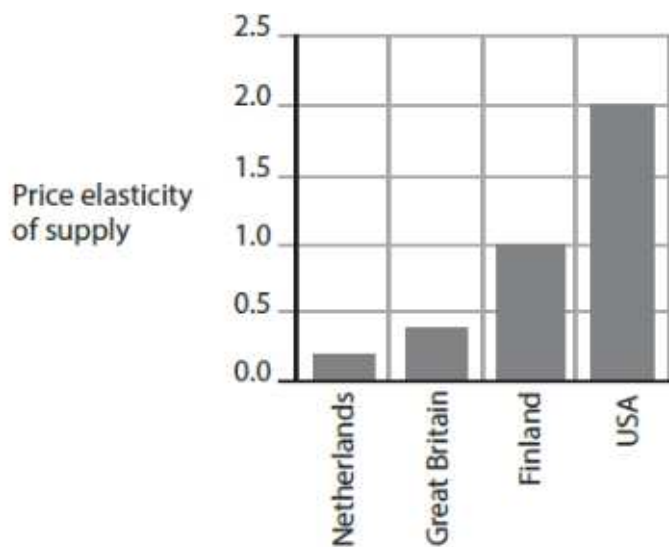
(20)

(Total for question = 60 marks)

Q9.

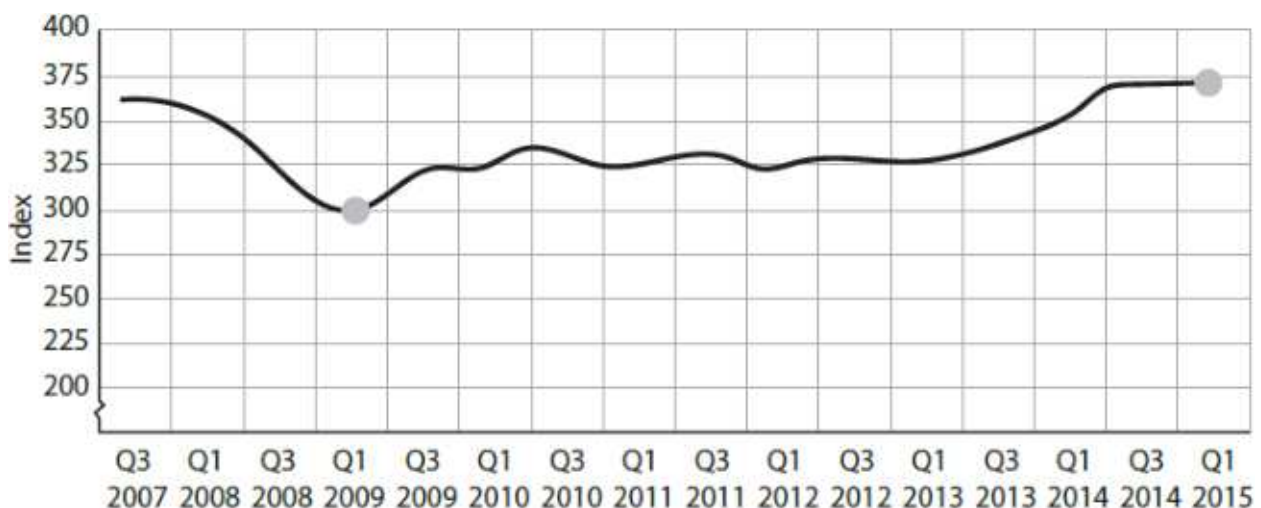
The market for housing

Figure 1 - Estimates of the price elasticity of supply of new housing, selected countries



(Source: adapted from Caldera Sánchez, A. and Å. Johansson (2011), "The Price Responsiveness of Housing Supply in OECD Countries", Figure 3, OECD Economics Department Working Papers, No. 837, OECD Publishing. <http://dx.doi.org/10.1787/5kgk9qhrn33-en>)

Figure 2 - Index of UK house prices (1993 = 100)



(Source: <http://www.nationwide.co.uk/about/house-price-index/download-data#~>)

(a) With reference to Figure 1, explain **one** possible reason for the differences in price elasticity of supply of new housing between countries.

(5)

(b) With reference to Extract A, assess the likely impact of the Help to Buy scheme on the market for rented properties in the UK.

(10)

(c) Explain the likely impact on producer surplus of an increase in the demand for housing. Use a diagram to illustrate your answer.

(6)

(d) With reference to Figure 2, calculate the percentage change in house prices between the first quarter of 2009 and the first quarter of 2015. You are advised to show your working.

(4)

(e) With reference to Figures 1 and 2 and your own knowledge, discuss the functions of the price mechanism in allocating housing.

(15)

Answer EITHER

(f) Evaluate the likely microeconomic effects of government intervention in the UK housing market.

(20)

OR

(g) Evaluate the case for government provision of goods and services such as flood defence schemes or housing.

(20)

(Total for question = 60 marks)

Q10.

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

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

Fuel duty is an excise tax imposed on the sale of petrol, included in the price paid by consumers, set at 58 pence per litre.

(Source: <https://www.gov.uk/tax-on-shopping/fuel-duty>)

(a) Draw a supply and demand diagram to show the incidence of a specific petrol tax on consumers and producers.

(4)

(b) The indirect tax on fuel is increased in a market in which the price elasticity of demand is -0.1 .

Which **one** of the following is the most likely effect on consumer and producer surplus?

(1)

- ☒ **A** Consumer surplus and producer surplus both decrease
- ☒ **B** Consumer surplus and producer surplus both increase
- ☒ **C** Consumer surplus decreases and producer surplus increases
- ☒ **D** Consumer surplus increases and producer surplus decreases

(Total for question = 5 marks)

Q11.

Markets for food and drinks high in fat, salt or sugar (HFSS)

Figure 1: UK market share of potato crisps, 2017

Firm	Brand	Size	Market share of firm	Market share of product	Price (£)
Walkers	All Walkers		55.3%		
	<i>of which:</i> <i>Regular Standard</i>	35 g		28.1%	0.45
	<i>Regular Max</i>	50 g		7.4%	0.63
	<i>Sensations</i>	40 g		2.0%	0.59
	<i>Doritos</i>	40 g		4.7%	0.45
	<i>Other</i>			13.1%	
KP	KP	50 g	22.7%		0.52
Tayto	Golden Wonder		4.2%		
		<40g		3.1%	0.38
		40g+		1.1%	0.72
Other	Other		17.8%		

(Source: adapted from <https://academic.oup.com/restud/article/3108825/The-Effects-of-Banning-Advertising-in-Junk-Food> 6 April 2017)

Extract A

The effects of a total ban on advertising of HFSS foods

Food and drinks which are high in fat, salt or sugar (HFSS) tend to be sold in highly concentrated markets. Tough new rules banning advertisements for HFSS products, such as those for confectionery, fizzy drinks and potato crisps, come into effect in July 2017 as a means to reduce consumption. The rules apply to media targeted at under-16s and will mean a major reduction in the number of advertisements children see for HFSS products in posters near schools, in films targeted at children, on catch-up television and in social media if it is directed at children. 5

There are three main factors that will determine the effectiveness of the intervention: first, whether advertising acts to expand the market share or steal rivals' market share. Secondly, how firms in the market adapt their behaviour in response to the ban. Thirdly, what substitute products do consumers turn to if they opted out of the targeted market. 10

Results from a recent survey in the UK suggest that the total quantity of crisps sold would fall by around 15% in the presence of an advertising ban, or by 10% if firms respond with price cuts, since the ban acts to make the market more competitive and firms respond to the ban by, on average, lowering their prices. 15

The survey showed that following a ban, consumers are more likely to switch to another junk food than to a healthy food, which (in addition to the pricing response of firms) acts to partially offset any health gains from the policy.

(Source: adapted from The Effects of Banning Advertising in Junk Food Markets, Dubois, Pierre; Griffith, Rachel, Review of Economic Studies Copyright © 2017, Oxford University Press <https://academic.oup.com/restud/article/3108825/The-Effects-of-Banning-Advertising-in-Junk-Food> 6 April 2017 and <https://www.asa.org.uk/news/tougher-new-food-and-drink-rules-come-into-effect-in-children-s-media.html> 30 June 2017)

Extract B

Taxing HFSS foods and subsidising healthy eating widens inequality

Since low-income groups spend a higher proportion of their income on food and tend to eat less healthily, they are the main targets of taxes on products that are high in fat, salt or sugar (HFSS). Subsidies on healthy food are seen as an alternative policy approach to encourage healthy eating. While data on the impact of such policies are scarce, a recent study on the distributional impacts of HFSS taxes and healthy food subsidies found that these actually widened health and fiscal inequalities. The policies tend to be regressive and favour higher-income consumers. Taxes on unhealthy food increase prices which have a greater impact on low income groups rather than higher income groups. Lower income groups prefer to buy HFSS food. 5 10

Subsidies encouraged all income groups to buy more fruit and vegetables. However, those on higher incomes proved more responsive and the average share of budget spent on healthy food actually increased for the higher income groups who were more likely to buy the subsidised healthy food and then spend the savings they had enjoyed on yet more healthy food. The diets of the higher income groups before the subsidy tended to be healthier. The choices of the higher income groups are more responsive to price changes. By contrast, lower income groups, if they responded to lower prices, often used the money saved to buy unhealthy items or something else entirely. The long-term benefits of a healthier diet are harder to grasp for consumers when information gaps exist. Often the immediate boost of a tasty treat is more appealing. Taxes and subsidies do not change that. Other strategies are needed to promote healthy eating, especially education. 15 20

(Source: adapted from Economist 5 October 2017 <https://www.economist.com/news/finance-and-economics/21730033-study-suggests-lower-income-families-end-up-paying-more-their-food-taxing-fat> and https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3031005 The Economic Journal September 2017 Vol 127 Issue 604)

Extract C

Tax on fatty foods in Denmark is an economic disaster

Denmark introduced a specific tax on saturated fat in October 2011. Recognised as a world-leading public health policy, it was abandoned just 15 months later having been both an economic and political disaster.

Indirect taxes of this sort are invariably regressive, disproportionately affecting the elderly and the poor. The specific tax led to prices rising on average 15% for highest-fat products, yielding a total decrease of 5% in the intake of saturated fat from products such as minced beef and cream. 80% of Danish consumers did not change their shopping habits at all. The behavioural change was economically damaging as consumers switched to cheaper brands and crossed the border to Sweden and Germany to do their shopping. Danish tax revenue fell as a result.

(Source: adapted from <https://iea.org.uk/in-the-media/press-release/evidence-shows-a-fat-tax-would-hit-poorest-the-hardest> 25 May 2013 and <https://www.cambridge.org/core/journals/public-health-nutrition/article/effects-of-the-danish-saturated-fat-tax-on-the-demand-for-meat-and-dairy-products/984CF03634C819D50E66C7B5DC5209DA/core-reader>)

(a) With reference to Figure 1 and Extract A, explain what is meant by a 'highly concentrated' market for potato crisps (Extract A, lines 2–3).

(5)

(b) Apart from changes in indirect taxes and subsidies, examine **two** causes of income inequality within a developed economy such as the UK.

(8)

(c) In Extract A, lines 15–16, it was suggested that some firms may respond to the advertising ban by cutting the prices of their products.

Using game theory and the information provided in Figure 1 and Extract A, discuss the effects **on firms** of cutting prices in an oligopolistic market.

(12)

EITHER

(d) Evaluate the microeconomic and macroeconomic effects of increased government spending on education to promote healthy eating in the UK.

(25)

OR

(e) Evaluate the likely microeconomic and macroeconomic effects of imposing a tax on HFSS foods.

(25)

(Total for question = 50 marks)

Q12.

The UK energy market

Figure 1: UK retail electricity and gas real price indices, 2004-2015

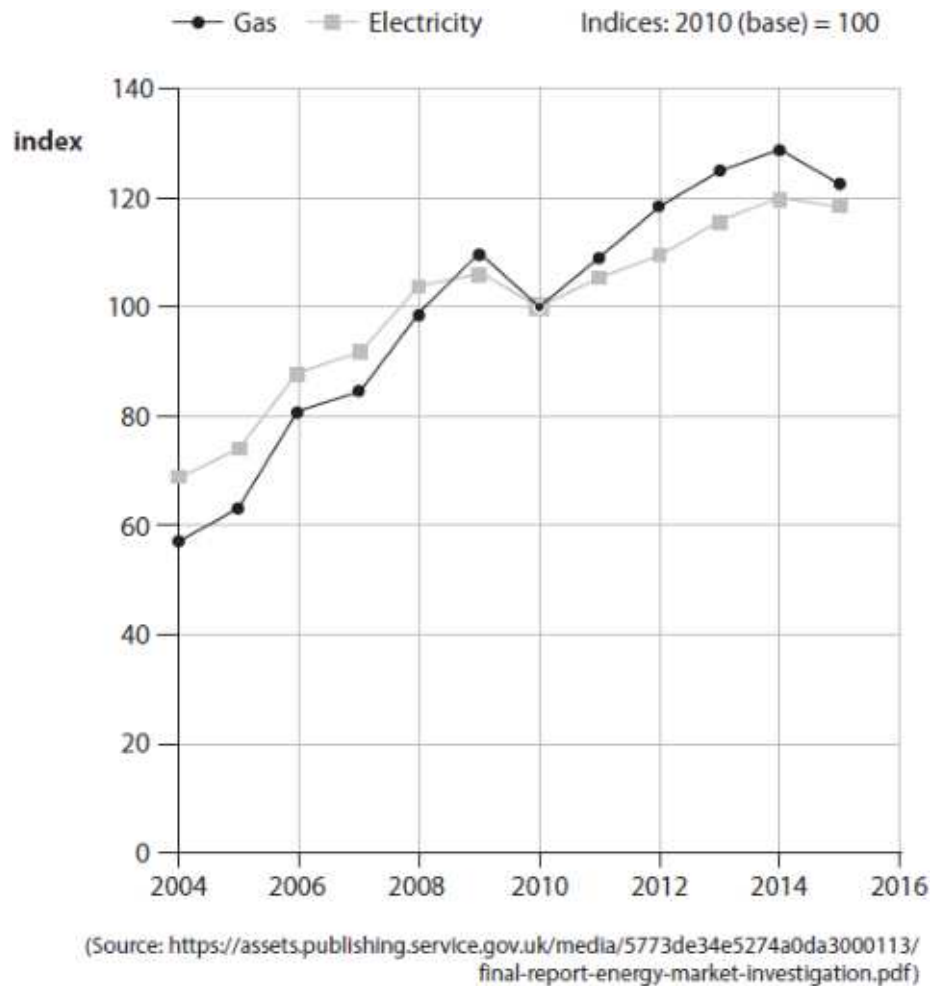


Figure 2: UK retail electricity and gas supply: market share by company, 2016

Company	Electricity %	Gas %
British Gas	23	36
EON	16	13
SSE	16	13
EDF	12	8
Scottish Power	11	9
RWE (nPower)	10	9
Other companies	12	12
Total	100	100

(Sources: <https://www.ofgem.gov.uk/chart/electricity-supply-market-shares-company-domestic-gb> and <https://www.ofgem.gov.uk/data-portal/retail-market-indicators>)

Extract A

Competition and Markets Authority (CMA) report into the UK energy market

An investigation into the UK energy market by the CMA concluded that customers have been paying £1.4 billion a year more than they would in a fully competitive market. It found that 70% of domestic customers of the six largest energy firms were on an expensive standard rate. These customers could each save over £300 a year by switching to a cheaper deal but appear reluctant to do so. 5

However, the CMA investigation found no evidence of anti-competitive practices by firms. There has even been an increase in new entrant energy suppliers over recent years and their combined market share has reached 12% in both gas and electricity supply.

To protect consumers, the CMA has introduced various measures to open up and increase competition in the UK energy market. These include: 10

- the creation of a database designed to help consumers switch energy suppliers – rival suppliers can directly contact these customers
- the conversion of all homes to smart energy meters making it easier for customers to measure energy consumption and switch supplier 15
- new rules to protect the four million vulnerable customers using prepaid meters – this includes a temporary price cap until smart meters have been installed.

(Source: adapted from 'Competition and Markets Authority Final report into Energy Market Investigation' <https://www.gov.uk/government/news/cma-publishes-final-energy-report-in-full>)

Extract B

Proposals to regulate profits in the UK energy market

Currently energy retail companies make an average profit of 7% of total revenue. The Chairman of the Competition and Markets Authority (CMA) suggested that these profits are as much as five times higher than they should be, given the companies' limited role in marketing, metering and billing customers. He recommended a profit cap of 1.25% of total revenue. 5

However, Scottish Power criticised proposals for regulating profits saying that it would reduce investment in the energy industry and undermine long-term energy provision. The firm claimed that such a low rate of return is below the profit margin made by supermarkets. 10

All six large energy firms are vertically integrated – producing as well as distributing gas and electricity. This can provide efficiency benefits but also harm competition.

(Source: adapted from 'Profit cap doesn't fit with new investment, energy boss warns', by Robin Pagnamenta, *The Times*, 19th September 2016)

Extract C

Skills shortages in the UK energy sector

The energy sector is facing a skills shortage of engineers and technicians. Some 29% of employers in the gas and electricity industries report unfilled job vacancies compared with an average of 18% across all industries.

A lack of information and advice on career prospects for young people is partly to blame - many graduates have a negative image of the work involved. There is also a lack of students taking science, technology, engineering and maths-based subjects at school and university. Less than one-fifth of the energy sector's workforce are women. 5

The energy sector is characterised by an ageing workforce - data from the UK Labour Force Survey reveal that around two-thirds of workers are aged over 50. These cannot easily be replaced as a long time period is required for training and developing workers' skills in a highly regulated industry. 10

Urgent action is required by businesses and the government to reduce labour immobility to benefit the energy sector. This action could include policies to increase investment in training programmes, recruit skilled workers from overseas, change the industry image and deal with its ageing workforce. 15

(Source: adapted from 'Sector insights: skills and performance challenges in the energy sector', by the UK Commission for Employment and Skills, March 2015; https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/416998/15.03.25_Energy_SLMI_-_evidence_report.pdf)

(a) With reference to Figure 1, explain **one** likely reason for the overall trend in the real price of gas and electricity.

(5)

(b) With reference to Extract A, discuss the likely effectiveness of 'measures to open up and increase competition' in the UK energy market.

(12)

(c) With reference to Extract B, assess how the regulation of energy suppliers' profits is likely to affect consumers **and** suppliers in the energy market.

(10)

The price elasticity of demand for electricity in the UK is estimated to be -0.35 in the short run and -0.85 in the long run.

(d) With reference to Extract A and your own knowledge, examine **two** possible reasons for the

change in price elasticity of demand for electricity over time.

(8)

(e) With reference to Extract C and your own knowledge, discuss policies businesses **and** government might implement to reduce labour immobility to benefit the energy sector.

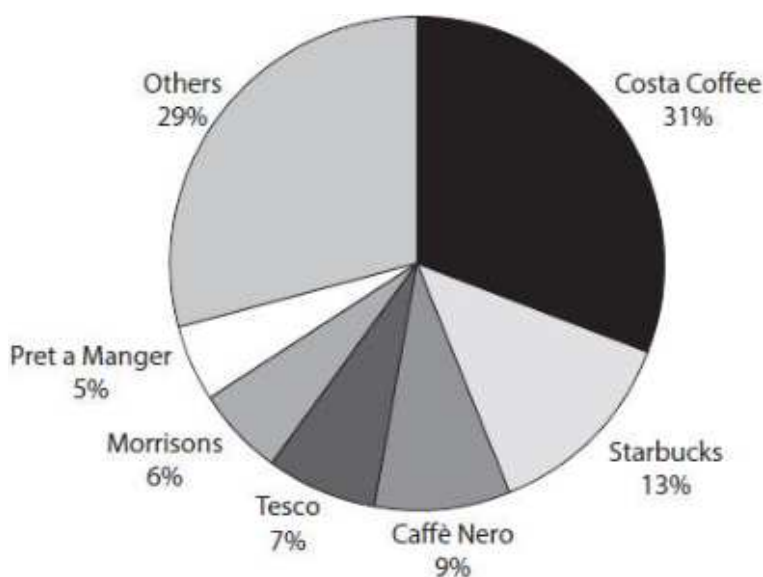
(15)

(Total for question = 50 marks)

Q13.

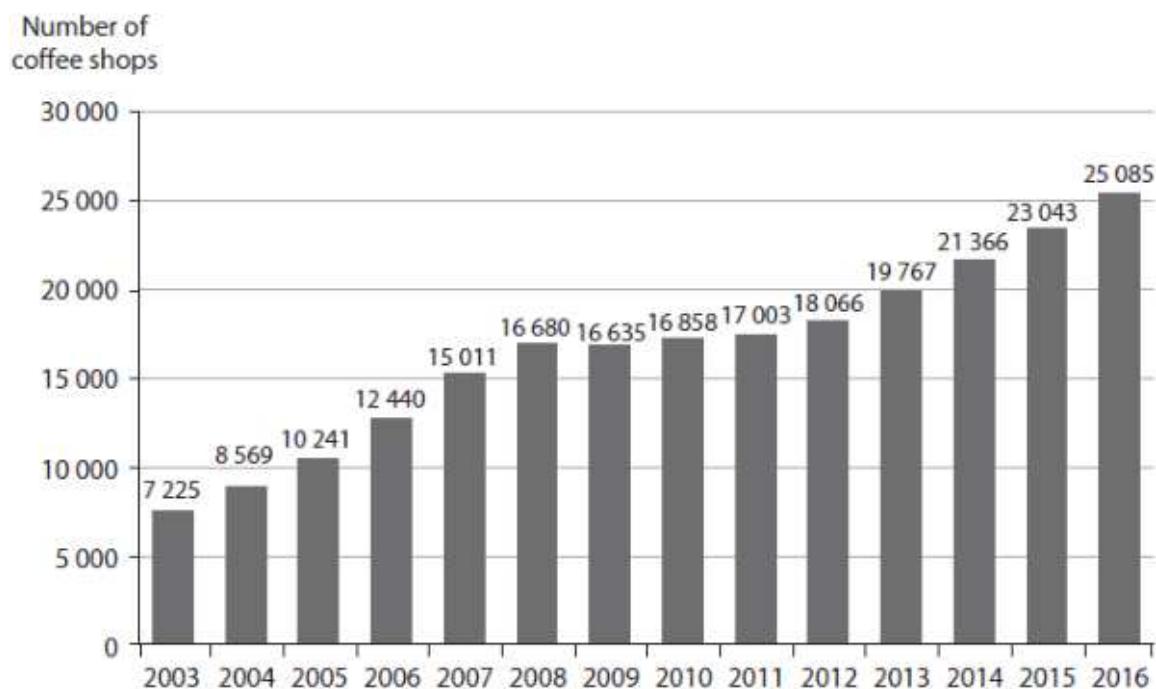
Branded coffee shops

Figure 1: Market share of UK branded coffee shops, 2015, percentages



(Source: <http://metro.co.uk/2015/12/14/the-uks-most-popular-coffee-shop-has-been-revealed-5564569/>)

Figure 2: Number of Starbucks coffee shops worldwide, 2003-2016



(Source: <https://www.statista.com/statistics/266465/number-of-starbucks-stores-worldwide/>)

Figure 3: Price comparison in selected London coffee retailers, February 2017

Coffee style	Starbucks	Costa Coffee	Caffè Nero	Greggs	McDonald's
Espresso Double	£2.00	£2.00	£1.70	£1.65	£0.99
Latte Medium	£2.60	£2.50	£2.50	£1.80	£1.79
Latte Large	£2.80	£2.70	£2.80	£2.10	£2.09

(Source: data collected from coffee shops in Holborn, London on 25 February 2017)

Extract A

Starbucks in Britain - a loss-making business?

Coffee shops are among the most profitable parts of the food and drink industry, and few are doing quite as well as Starbucks, a US-based transnational company. Starbucks may be complaining of adverse global market conditions but that did not stop the world's biggest coffee chain from reporting record annual profits in 2016. It made a profit of almost US\$4.2 billion for the year, up 16% on 2015. That was mainly the result of a strong performance in its biggest market, America, where revenue rose 11%. The fastest growth was in the China and Asia Pacific region, with revenue up 23%. Howard Schultz, the CEO of Starbucks, said its Chinese coffee shops were the most efficient and profitable. While Starbucks still makes most of its profit in the US, Mr Schultz has said expansion in China will secure its future for "decades to come" and announced plans to more than double the number of shops in China to 5 000 by 2021.	5
However its British subsidiary, at first glance, appears to be doing less well. It has announced its first ever profit in Britain in 2015 – of just £1 million – despite opening its first coffee shop in the UK in 1998. It now has 849 UK outlets. The main reason why Starbucks has reported persistent losses in the UK is not due to a lack of demand for its coffee, but to minimise its tax bill. It is claimed that some of Starbucks' revenue earned in the UK is transferred to its Dutch subsidiary, which is charged lower rates of tax.	10
Starbucks is not finding life as easy in Britain as in the USA. It faces competition from home-grown chains such as Costa and Caffè Nero. Accusations of tax avoidance have also damaged Starbucks' sales to the benefit of its competitors. A survey found that a third less people rated Starbucks as their preferred coffee shop than they did before the tax-avoidance allegations were first published.	15
These issues have forced Starbucks to change its strategy. It has slowed down its expansion plans in the UK and has closed 67 underperforming coffee shops over the past year. It has also tried to repair its reputation by transferring its European headquarters from Amsterdam to London.	20
	25

(Sources: adapted from *The Economist* 14 February 2015 <http://www.economist.com/news/business-and-finance/21643271-tax-and-starbucks-company-report-2016> and http://s21.q4cdn.com/369030626/files/doc_financials/2015/Starbucks-Fiscal-2015_Financial-Highlights.pdf)

Extract B

Tax on disposable coffee cups?

Two and a half billion disposable cups are thrown away every year in the UK, that is, seven million every day. Only one in 400 is recycled. The UK Environment Minister has suggested that a coffee cup tax could work in a similar manner to the plastic bag charge. The 5 pence a bag charge has led to an 85% reduction in the number of bags being given out since October 2015. It is estimated that introducing a tax on disposable coffee cups would cut usage by two billion every year. One environment spokesperson, Kate Parminter, said: "We've seen how dramatically a small charge has affected public behaviour when it comes to the plastic bags and it is clearly time to extend it to coffee cups. Most people purchase a tea or coffee and throw away the cup without even thinking about it, but a charge would increase our awareness of the environmental impact."	5
In response, another MP welcomed her comments but said he did not believe a tax was the solution. He said: "My initial reaction is charging 5p or 10p for the cup will not work. It will not encourage people to take their own cups in if a coffee goes up from £2.60 to £2.65. I suspect a more technological answer is what we need – either the composition of the disposable cups being changed so they're more easily recyclable, or changing the technology in the recycling."	10
Disposable coffee cups contain a plastic coating inside the cups which prevent them from becoming soggy, making them difficult to recycle. There are just two specialist facilities in the UK that have the required equipment to separate plastic from paper for recycling. Almost no recycled paper is used in the production of disposable cups, meaning that some 43 000 trees must be cut down annually to keep up with the demand. CO ₂ emissions of around 83 000 tonnes are generated every year for their production.	15
	20
	25

(Sources: adapted from <http://www.independent.co.uk/news/uk/politics/disposable-coffee-cups-could-be-taxed-like-plastic-bags-environment-minister-says-a6938126.html> 05/09/16 and <https://www.cchdaily.co.uk/lib-dems-call-5p-plastic-bag-tax-coffee-cups>)

Extract C

German city of Freiburg takes action on cutting the use of disposable coffee cups

The 'Freiburg cup', made from dishwasher-proof plastic, can be reused hundreds of times. Cups are issued with a one-euro deposit, and can be returned to any of the participating coffee shops in the German city. The cups, which are provided to coffee shops by local councils, are washed in the cafés and bakeries that have signed up to the scheme before being reused. 56 coffee retailers have signed up, and 10 000 cups are being used.	5
One of the main obstacles facing a wider-reaching scheme, however, is the number of café chains in Germany that are unwilling to use unbranded multi-use cups, particularly Starbucks and McDonald's. Starbucks already offers a discounted coffee for customers with a multi-use cup, but only if it is bearing the unmistakable Starbucks logo.	10

(Source: adapted from <http://www.dw.com/en/germanys-love-for-coffee-to-go-leaves-environmental-groups-demanding-action/a-36689719>)

- (a) With reference to Figure 1, briefly explain the market structure that best describes the UK branded coffee shop market. (5)
- (b) With reference to Figure 3 and other information provided, discuss the price and non-price strategies that Starbucks may use to increase profitability. (12)
- (c) Examine the advantages of using an indirect tax as a means of reducing the use of disposable coffee cups. (8)

EITHER

(d) Evaluate the microeconomic and macroeconomic factors that may influence Starbucks' decision whether to expand in a particular country.

(25)

OR

(e) With reference to the information provided and your own knowledge, evaluate the microeconomic and macroeconomic effects of increased UK demand for coffee at branded coffee shops.

(25)

(Total for question = 50 marks)

Q14.

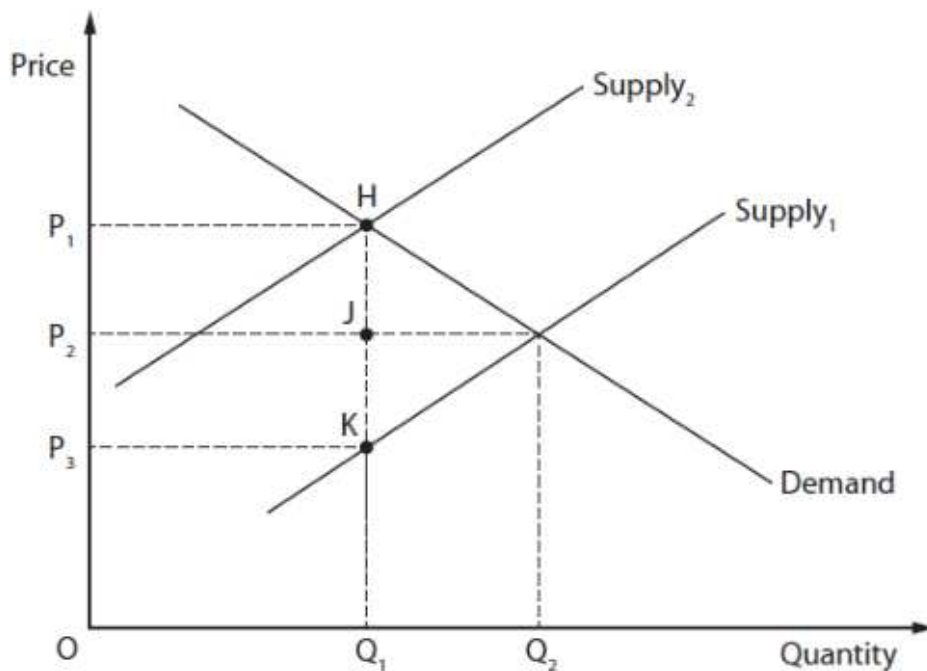
Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.

Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .

The UK Government uses a range of indirect taxes to affect the market prices and quantities of many goods and services.

(a) In the diagram below, the government imposes a specific tax on a product.

This shifts the supply curve from Supply₁ to Supply₂.



The government's tax revenue is shown by the area:

(1)

- ☒ A OP_1HQ_1
- ☒ B P_2P_1HJ
- ☒ C P_3P_1HK
- ☒ D P_3P_2JK

(b) Using an example, explain why the government imposes **specific** taxes on many goods and services.

(3)

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Q15.

The average fee charged by high-street estate agents to homeowners for selling property is 1.3% of the final sale price.

(Source: <http://www.which.co.uk/money/mortgages-and-property/homemovers/guides/selling-a-house/estate-agent-fees-and-contracts>)

(a) Assume the selling fee is 1.3%. Calculate the payment received by an estate agent on a property sold for £489 000. You are advised to show your working.

(2)

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the entire width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the paper.

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In August 2016 the Office for National Statistics reported that the average house price in London was £489 000, whereas in the North East of England it was £127 000.

(b) The ratio of the average house price in London to the average house price in the North East of England is:

(1)

- ☒ **A** 0.26
- ☒ **B** 3.62
- ☒ **C** 3.85
- ☒ **D** 7.40

(c) Explain **one** likely reason for the difference in average house prices between London and the North East of England.

(2)

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(Total for question = 5 marks)

Mark Scheme

Q1.

Question Number	Answer	Mark
(a)	Application 2 Price elasticity of supply calculation % change in quantity supplied $(28\,268/134\,612 \times 100)$ = 21% (accept range 20.9 to 21) (1) $PES = 21/5.4$ (1) = 3.9 Award 2 marks for 3.9 (Accept a range between 3.8 and 4)	(2)

Question Number	Answer	Mark
(b)	Application 1 The only correct answer is C A is not correct because the PES does not equal to infinity B is not correct because the PES does not equal zero D is not correct because the PES is not less than one	(1)

Question Number	Answer	Mark
(c)	Knowledge 1, Analysis 1 Identification of a factor determining PES (1) e.g. • levels of spare capacity • stocks of finished goods and components available e.g. bricks • time period and production speed • level of factor mobility/flexibility • availability of bricklayers, electricians etc • availability of land • planning permission/regulations • availability of technology/machinery to build Explain as to the impact on price elasticity of supply (1) e.g. • limited availability of land/builders (1) so supply will be inelastic (1)	(2)

Q2.

Question Number	Answer	Mark																								
(a)	Application 2, Knowledge 2 Application: up to 2 marks for completing the table accurately. 1 mark for any correct answer in the column and 2 for all accurately complete/completed to the appropriate point. <table><tr><th>Price</th><th>Quantity demanded per month (000s)</th><th>Quantity supplied per month (000s)</th><th>New quantity supplied per month (000s)</th></tr><tr><td>£25</td><td>400</td><td>320</td><td>240</td></tr><tr><td>£30</td><td>360</td><td>360</td><td>280</td></tr><tr><td>£35</td><td>320</td><td>400</td><td>320</td></tr><tr><td>£40</td><td>280</td><td>440</td><td>360</td></tr><tr><td>£45</td><td>240</td><td>480</td><td>400</td></tr></table> Knowledge/understanding: 1 mark for identifying the original and new equilibrium (1) Current equilibrium price = £30 New equilibrium identified = £35 (where QD = 320 and QS = 320) (1) 1 mark for calculating the change in the equilibrium price (1) £35-£30 = £5 increase	Price	Quantity demanded per month (000s)	Quantity supplied per month (000s)	New quantity supplied per month (000s)	£25	400	320	240	£30	360	360	280	£35	320	400	320	£40	280	440	360	£45	240	480	400	(4)
Price	Quantity demanded per month (000s)	Quantity supplied per month (000s)	New quantity supplied per month (000s)																							
£25	400	320	240																							
£30	360	360	280																							
£35	320	400	320																							
£40	280	440	360																							
£45	240	480	400																							

Question Number	Answer	Mark
(b)	A	(1)

Q3.

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 CO₂ 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)
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Knowledge, application and analysis		
Level	Marks	Descriptor
	0	A completely inaccurate response.
Level 1	1-4	Displays ability to apply knowledge in context but will focus on a small range of elements. Demonstrates understanding by identifying relevant information. Demonstrates knowledge and understanding of terms, concepts, theories and models
Level 2	5-8	Shows ability to apply economic ideas and relate them to economic problems in context. Displays knowledge and understanding of economic principles, concepts and theories to make limited analysis or narrow analysis
Level 3	9-12	Analysis is clear and coherent with evidence well integrated, although may focus on some of the broad elements of the question more than others. Shows ability to apply economic ideas and relate them directly to the broad elements in the question.
Level 4	13-16	Analysis is relevant, clear and coherent with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems covering both microeconomic and macroeconomic effects. A clear understanding of economic principles, concepts, theories and arguments.

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

Q4.

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

	Analysis: 1 mark for explanation e.g. • Process by which the intervention affects exchange rate/interest rate e.g. the government buys US dollars to decrease the price of Turkish lira (1) by increasing the supply of lira on the forex market (1) or raises interest rate to increase the price of Turkish lira (1) NB a diagram can be seen as application or analysis, if used in a valid context.	(5)
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Question Number	Answer	Mark
(b)	Knowledge 2, Application 2, Analysis 2, Evaluation 2 Knowledge/ implicit understanding: 2 marks (1+1) for each reason and explanation e.g. a lower exchange rate can: • Reduces financial risks • To bring stability/security in the economy • Harms borrowers who have borrowed in foreign currency • Causes inflation as import costs rise • Worsens the terms of trade • Worsens living standards • Short term J-curve effects on current account of the Balance of Payments Application: (2 marks: 1+1 or 2) • Turkish inflation 25% • Lira has lost a third of its value of US dollar 2018 (1) • Turkey is highly indebted in foreign currency (1) • Government takes measures against excessive appreciation or depreciation of the Turkish lira to reduce financial stability risks (1) • The financial market faces difficulties in trying to restore <i>foreign investors'</i> confidence (1)	

	Analysis: 2 marks (1+1) for linked development of each point e.g. • A weaker currency can lead to cost push inflation as import prices rise • A weaker currency worsens the terms of trade as export prices fall relative to import prices • There will be less investment if there is a loss of foreign investors' confidence/AD shift Evaluation (2 marks: two points 1+1 or 2). Points might include: • Inflation is very high (25%) so this should be main reason not to allow a fall in the exchange rate • Inflation is showing signs of reversing so a fall in the exchange rate may be less problematic • Problems caused by inflation might be outweighed by the other benefits such as export-led growth/improved competitiveness • Benefits of weak exchange rate, e.g. exports cheap, • Other benefits of weak currency e.g. stimulus of economy, increased competitiveness, higher employment and FDI	(8)
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Question Number	Indicative content	Mark
(c)	Knowledge 2, Application 2, Analysis 4 Knowledge/implicit understanding: Policies identified might include: • Indirect tax/charges • Ban or other regulation • Free bags/nets or other state provision • Fines • Behavioural economics policy Application: • Tax or charge on each item. Might be illustrated through a specific tax diagram or similar. • Ban in some parts of Turkey for specific types (carcinogenic black bags). Might be supported by a limit on supply diagram. • Fines for consumers and retailers in some parts of Turkey • Free bags/nets or other state provision in e.g. 20 000 in Corlu near Istanbul • 950 tonnes of plastic waste Analysis: • Explanation of process linking the intervention to the reduction in use of bags. • This might be shown through a diagram(s).	(8)

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

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

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

	9 marks for evaluation – points might include: • Interest rate might not be the most significant cost for firms • Contractionary monetary policies already very tight. Depends on the interest rates in other markets • Inflation has peaked and there are signs that it will fall so the rise in interest rates is not necessary • Trade-off between objectives or prioritisation e.g. lower inflation at the cost of higher unemployment might be shown with critical use of a Phillips Curve • Depends on interest rates in other markets- do we mean lending rates in other countries. • Turkey's private sector is resilient - they may refer to this explaining that shut down is less likely • Impact on housing market will depend on whether people own homes and are mortgaged or whether they rent, or whether mortgage is fixed or variable rate • Magnitude the interest rate change - Figure 1 suggests large increases and therefore significant impact/large changes are unable to have much further effect	(25)
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Knowledge, application and analysis		
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays ability to apply knowledge in context but will focus on small range of elements. Demonstrates understanding by identifying relevant information. Demonstrates knowledge and understanding of terms, concepts, theories and models.
Level 2	5–8	Shows ability to apply economic ideas and relate them to economic problems in context. Displays knowledge and understanding of economic principles, concepts and theories to make limited analysis or narrow analysis.
Level 3	9–12	Analysis is clear and coherent with evidence well integrated, although may focus on some of the broad elements of the question more than others. Shows ability to apply economic ideas and relate them directly to the broad elements in the question.
Level 4	13–16	Analysis is relevant, clear and coherent with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems covering both microeconomic and macroeconomic effects. A clear understanding of economic principles, concepts, theories and arguments.

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

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

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

Q5.

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

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

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

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

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

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

Question Number	Indicative content	Mark
(d)	Knowledge 4, Application 4, Analysis 8 Evaluation 9 Microeconomic effects: • supply and demand diagram illustrating the impact of maximum prices: contraction in supply and extension of domestic demand • shortages of products subject to price controls • need for rationing • greater price stability for producers • implications for resource allocation: producers will switch resources to the production of products not covered by price controls. Macroeconomic effects: • falling export revenues from beef sales • negative impact on Argentina's balance of trade • could cause fall in the rate of economic growth • negative implications for Argentina's economic development • fall in the rate of inflation • price controls might act as an incentive for producers to diversify and/or develop manufacturing and tertiary industries.	

	Possible evaluation points include: • impact of price controls depends on how rigorously they are enforced • producers may not reallocate resources to products not subject to price controls if they believe that they will only exist for a short time • impact on the balance of trade may be minimal, e.g. because of the increase in exports of soya • impact on the rate of inflation may be limited to the short-term: once price controls are removed the rate of inflation might increase significantly	(25)
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Knowledge, application and analysis		
Level	Marks	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays ability to apply knowledge in context but will focus on a small range of elements. Demonstrates understanding by identifying relevant information. Demonstrates knowledge and understanding of terms, concepts, theories and models
Level 2	5–8	Shows ability to apply economic ideas and relate them to economic problems in context. Displays knowledge and understanding of economic principles, concepts and theories to make limited analysis or narrow analysis
Level 3	9–12	Analysis is clear and coherent with evidence well integrated, although may focus on some of the broad elements of the question more than others. Shows ability to apply economic ideas and relate them directly to the broad elements in the question.
Level 4	13–16	Analysis is relevant, clear and coherent with evidence fully and reliably integrated. Economic ideas are carefully selected and applied appropriately to economic issues and problems covering both microeconomic and macroeconomic effects. A clear understanding of economic principles, concepts, theories and arguments.

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

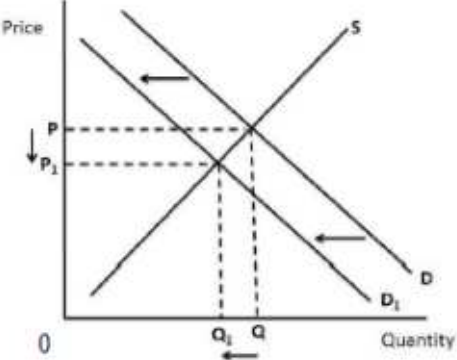
Question Number	Indicative content	Mark
(e)	Knowledge 4, Application 4, Analysis 8, Evaluation 9 Microeconomic effects: • primary producers: export revenues may fall since demand for many primary products is price inelastic • increase in costs for firms reliant on imported raw materials • increase in competitiveness for Argentine exporters of manufactured goods. Macroeconomic effects: • increase in the competitiveness of Argentine's goods and services may lead to an improvement in the current account of the balance of payments • increase in the rate of economic growth • leading to an increase in employment • cost push inflation resulting from increased costs of imported goods • increase in the real burden of foreign debt.	

	Possible evaluation points include: • impact on individual Argentine producers depends on their reliance on imports and/or exports • demand for some products, e.g. soya may not be adversely affected because demand is increasing rapidly in China • inflation is very high so any competitive advantage may be lost quickly. Impact on current account will depend on whether the Marshall-Lerner condition is fulfilled • short-run and long-run effect on the current account may be analysed using the J curve effect • the current account will only improve if the Marshall-Lerner condition is fulfilled, i.e. if the sum of the price elasticity of demands for imports and exports is greater than 1	(25)
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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.

Q6.

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

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

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

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

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

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

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

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

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

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

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

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

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

Candidates may refer to Adam Smith Consumers free to pursue own self interest Profit incentive will mean firms will want their consumers to live long – so move out of tobacco and into e-cigarette market. Without government regulations e-cigarettes market will be easier for new firms to enter thus improving competition. Competition between e-cigarette manufacturers to maximise profits will drive health improvements and lower costs making them more price competitive. Candidates may refer to Friedrich Hayek Resource allocation from tobacco to e-cigarettes will be brought about by market forces, which will be far superior to any state planning system. Individuals do not have perfect information on cigarettes but have the best knowledge of their own situation. The price mechanism acts as a communication network, markets are self-correcting. Government lacks sufficient information about everything happening in the cigarettes market to be able to make informed decisions.	(14)
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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 Failings of the price mechanism • Information gaps • Asymmetric information • Externalities • Peer pressure ignores utility • Habit forming distorts utility Possible different disadvantages or approaches : * While consumers may maximise their private utility $MSC > MSB$, with explanation. e.g. passive smoking/health care costs * Without government intervention the oligopolistic/monopolistic power of cigarette firms, in the form of advertising and propaganda, will go unchecked Candidates may refer to Karl Marx Consumers exploited in past by misinformation on tobacco and due to being addictive they become dependent. Competition and the need to profit maximise will mean firms cut costs risking consumers health and increase prices thus reducing consumer surplus. Nature of free market is for powerful monopolies to emerge that can further exploit consumers.	(6)

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

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

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

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

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

Appendix 1

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

word is included below.

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

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

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

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

Q7.

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 line 2) • 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)
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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.
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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	
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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.

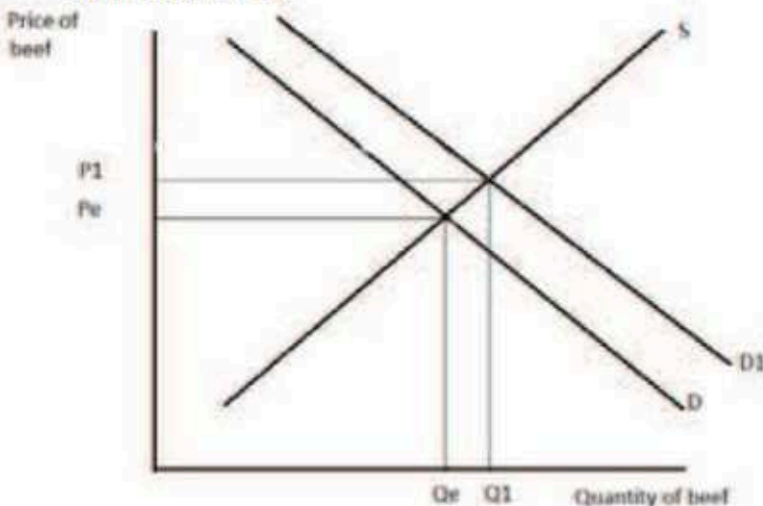
Question Number	Indicative content	Mark
(e)	Knowledge 4, Application 4, Analysis 8, Evaluation 9 16 marks for KAA, for effects of increased minimum wage Microeconomic effects may include: • rise in wages will benefit very low paid workers. Might be shown on increasing NMW diagram • effect on cost to 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	
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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.

Q8.

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

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

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

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

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

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

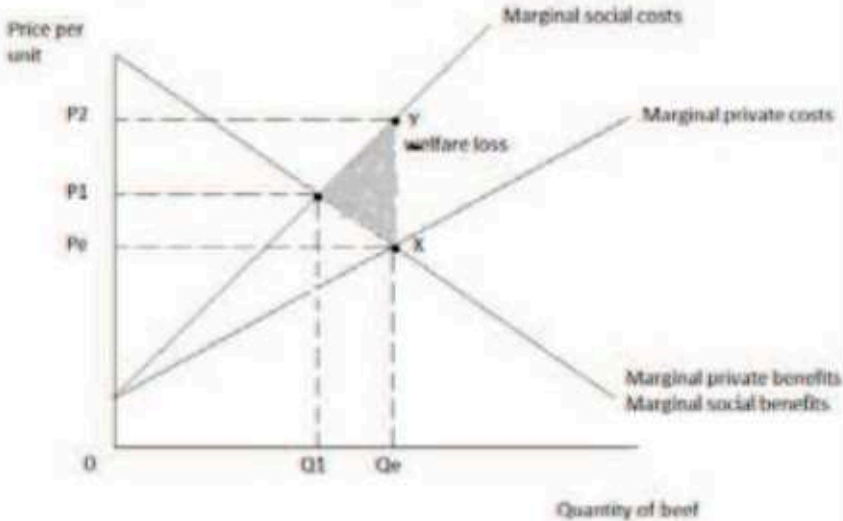
Question Number	Answer	Mark
(d)	Knowledge 2, Application 2 2 marks for correct use of formula (1+1). 2 marks for correct answer (1+1), e.g: • 2012 – $554/700 (1) \times 100 = 79\% (1)$ • 2013 – $562/830 (1) \times 100 = 68\% (1)$ NB if the answer given is 79% award 2 marks; if the answer given is 68%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

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

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

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

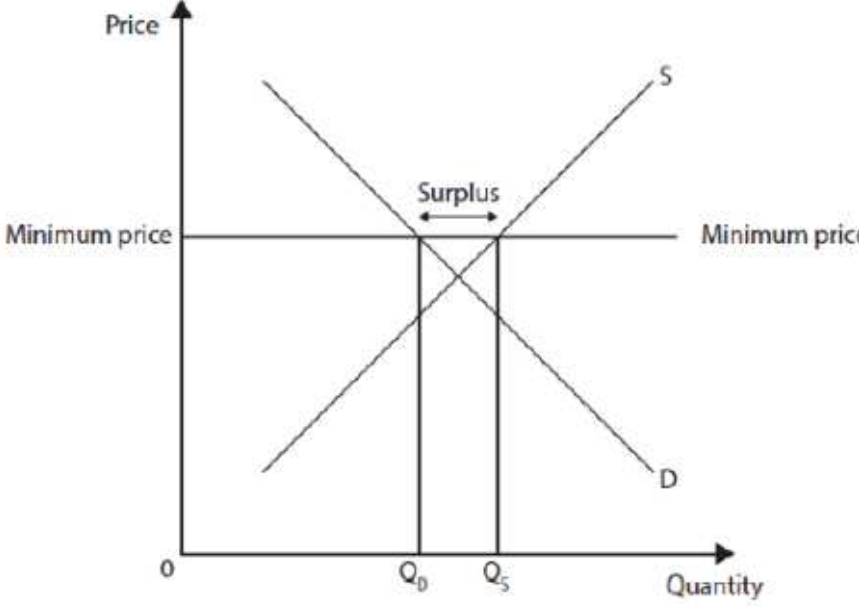
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced. Evaluative comments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

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

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

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

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

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

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

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

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

Q9.

Question Number	Answer	Mark
	Knowledge 1, Application 2, Analysis 2 Knowledge/understanding 1 mark for e.g: - definition or formula or diagram of price elasticity of supply. Price elasticity of supply (PES) measures the responsiveness of quantity supplied to a change in price. PES can be calculated using the following formula: $\text{PES} = \frac{\text{percentage change in Quantity Supplied } (\% \Delta \text{ in } Q_s)}{\text{percentage change in Price } (\% \Delta \text{ in } P)}$ Application Linked application focussed on new housing stock (1+1) e.g. - Price elasticity of supply of 1 means unitary elasticity; $\text{PES} > 1$ means elastic; $\text{PES} < 1$ means inelastic (1) 1 mark for identifying Supply elasticities in the USA or Finland are at or above unity (1) and 1 mark for identifying a country with particularly low elasticities of supply e.g. the Netherlands or the UK (1). - Candidates who compare the elasticities of one country where supply is elastic and one country where supply is inelastic: e.g. USA +2.0 (1) and UK +0.4 (1). - Supply is particularly unresponsive to prices in the Netherlands, more than ten times less responsive than in the USA (1+1). - A numerical illustration of the effects of price changes in different countries (1+1)	

	Analysis Linked analysis (1+1) e.g. - Above unity PES implying that in response to a demand shock housing output will increase proportionally more than prices (1) and below unity where housing supply is relatively unresponsive (1). - Explaining how it is easier to build new houses in the US compared to the UK (1) where it is more difficult to build new houses e.g. due to planning restrictions in UK (1). - Allow other reasons/factors that affect PES e.g. land availability, technology or time (1+1).	(5)
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Question Number	Indicative content	Mark
	Knowledge 2, Application 2, Analysis 2 • Help to Buy is a subsidy making home ownership more attractive • Cross (price) elasticity of demand (XED) measures the responsiveness of quantity demanded for one good to a change in the price of another good. • Identify home ownership and rented properties as substitutes • Likely positive cross elasticity of demand – Help to Buy scheme may result in decrease demand in rental sector • Deposit size 5% rather than 20% – demand increases • Demand for rental properties decrease – diagram showing shift inwards • Price and quantity of rental properties to fall • Consumer and Producer surplus in rented sector declines • Alternative views valid e.g. Help to Buy may increase house prices and therefore increase demand for rented accommodation from those not eligible for Help to Buy. Help to Buy shifted demand for private houses to the right (increase) and that, ceteris paribus, this would shift demand for rented accommodation to the left (reduction).	(6)

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

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

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

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

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

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

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

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

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

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

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

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

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

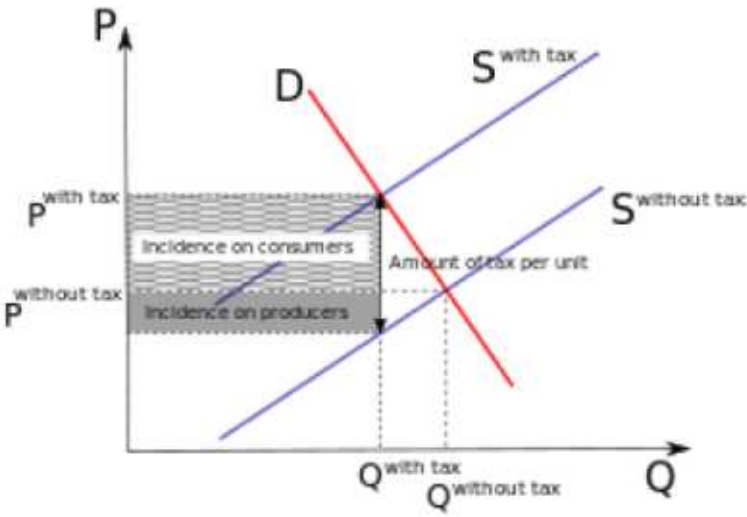
Question Number	Indicative content	Mark
	Knowledge 4, Application 4, Analysis 6 • Candidates may illustrate through use of appropriate diagram. • Public goods: non excludable and non rivalrous, e.g. flood defence schemes. • Failure of free market – free rider problem. • Externalities – positive or negative,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

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

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

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

Q10.

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

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

Q11.

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 <i>legal</i> 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.

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 be 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.	

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 healthy 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)
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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	
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	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)
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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 1, Application 1, Analysis 3 Knowledge/Understanding: (up to 1 mark) • Real price of gas and electricity refers to their price adjusted to remove the effects of inflation (1) • Increase in demand (1) • Decrease in supply. (1) • The lack of competition (1) Application: (up to 1 mark) e.g. • Figure 1 indicates the real price of gas and electricity has increased since 2004: electricity from 70 to 119 or rises 70% (accept approximations) (1) • Gas from 58 to 121 or rises by 108% (accept approximations) (1) Analysis: up to 3 marks for linked development of one reason e.g. • Rise in price (1) due to non price determinant of demand e.g. income, economic growth, population growth (1) explained using contraction in demand or extension in supply or other extended analysis of market forces (1) • Rise in price (1) due to non price determinant of supply e.g. increase in cost of production, finite resources (1) explained using contraction in demand or extension in supply or other extended analysis of market forces (1) • Energy firms have sought to increase profits (1) tacit collusion (1) provide more dividends and higher share prices for shareholders (1) directors salaries linked to profits (1) • Energy firms able to exploit consumers not behaving rationally due to: influence of other consumers (1) habitual behaviour (1) computation difficulties (1)	(5)

Question Number	Indicative content	Mark
(b)	Knowledge 2, Application 2, Analysis 4 • Measures referred to will increase competitiveness by removing imperfect information, addressing asymmetric information, reducing barriers to entry and exit. • Customer database will help producers to directly contact consumers to offer better deals. <i>It may encourage firms to enter the market – the extract refers to recent new entrants having a combined market share of 12% for gas and electricity. Firms may enter as they have more market knowledge of customers for each energy supplier and are permitted to contact them directly offering their service.</i> • Smart meters will increase market information for consumers on their electricity consumption so may seek better deals. <i>Scope exists to enter as 70% of domestic customers of the six largest energy firms on an expensive standard tariff. Smart meters provide more information to customers on energy usage and price / reduce issue of asymmetric information / forcing energy suppliers to become more price competitive.</i> • Price cap for vulnerable customers on pre-paid meters will help limit increases in energy bills and so offer some protection as a surrogate for competition. <i>Price cap may offer some degree of certainty over the price firms could charge / encouraging market entry.</i> • Other evidence from Extract A demonstrates that measures have been successful in the past e.g. new entrants in the market NB: Answers must relate to <i>effectiveness of measures</i> NB: Arguments that the measures are successful may be seen as KAA and unsuccessful 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.

Question Number	Indicative content	Mark
(b) continued	Evaluation 4 - Some consumers may still not switch to cheaper energy tariffs / due to problem of computation, inertia or habit. - Customer database may lead to unintended consequences e.g. customer annoyance at telephone calls so they ignore calls, information overload resulting in making it harder to compute to make a decision. - Significant barriers to entry exist in the domestic energy market: large economies of scale/established firms have some customer loyalty / advertising costs / licences required to supply energy. - Price cap is only temporary and covers just 4 million customers / energy prices through pre-paid meters already exceed standard bills. - Price cap may discourage firms from entering the market / as less profit incentive. - Price cap may automatically become the price each company sets and so reduces competition and may increase prices. - CMA found no evidence of anti-competitive practice.	(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
(c)	Knowledge 2, Application 2, Analysis 2 - Understanding of profit cap (a limit on profits as a percentage of total revenue). Linked development: profit cap is usually introduced in industries where supernormal profits are regarded as excessive / profit cap may be necessary where little competition exists or where collusion is possible. - Chair of CMA recommended 1.25% profit cap against industry return of 7%. Linked development: profit cap is proposed in the retail sector of the energy industry which involves just marketing, billing and metering energy. - Impact on consumers: lower energy bills and so households may be better off in real terms / may increase energy consumption / domestic firms that consume energy may become more competitive due to lower costs of production / rising consumer surplus. - Impact on energy producers: lower revenue and so lower profits / less funds for investment and so risk of energy supplies in future / falling share prices and dividends / change in objective e.g. from profit maximisation to sales maximisation. NB: For Level 3 response candidates must refer to consumers and supplies NB: Negative effects on consumers and producers may be seen as KAA and positive effects as evaluation or 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
(c) continued	Evaluation 4 • There may be upward effects on price for consumers as firms become more x-inefficient or reduce total investment. • Depends on the level of profit cap on energy firms / how long it may be applied: if it is 1.25% it may be too harsh compared to other industries such as supermarkets. • It is a vertically integrated industry – so energy companies can make profits in the generation of electricity and gas. • Energy firms appear to have made huge profits over previous years and so may be able to cope with lower profits. • Energy firms may increase sales revenue and so profit values may still be high. • Energy suppliers experience low levels of risk in their retail operations so necessary rewards are lower. • Unintended consequences such as a reduction in new entrants to the industry and less competition, risk of power shortages due to under investment or excess demand. • Multinational owners may use transfer pricing to avoid profit cap.	(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
(d)	Knowledge 2, Application 2, Analysis 2, Evaluation 2 Accept answers based on switching between electricity suppliers as well as switching from electricity to other energy sources Knowledge/Understanding: 2 marks for identification of two reasons (1+1) e.g. • It takes time for consumers to switch demand following price changes • Existing contracts make it difficult to switch in the short term • More substitutes available in the longer term Analysis: 1 mark for linked explanation of each reason (1+1) e.g. • Demand more price inelastic in short run as: takes time for consumers to adjust their consumption habits (habitual behaviour) / imperfect market information / no close substitutes. • Demand less price inelastic in long run as: some consumers are able to change their habits improved market information / substitutes may emerge such as greater use of gas appliances or installation of solar power panels.	

	Application: 2 marks for reference to data (1+1), e.g. • Idea that demand is price inelastic (1) becoming less inelastic / more elastic in the long run (1) • Use of Extract A e.g. 70% of domestic consumers do not switch (1) • Development of new technology that reduces electricity consumption / electricity saving lightbulbs or energy efficient kettles (1) • Increased awareness of measures to become more price sensitive (1) to become more energy efficient (1) • Costs and time involved in switching to energy-saving appliances (1)	
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	- Improved consumer knowledge of consumption through smart meters (1) - New firms might enter the market using gas / biofuel / solar / wind / households producing their own rather than buying electricity (1) Evaluation: 2 marks for two evaluative comments, OR 2 marks for identification and linked development of one comment - The figures are averages for all households – but great variation exists between households; for example, there may be no effect on households who have little concern for energy saving measures. - High income households may not be affected by rising electricity prices as it comprises such a small part of total income – so demand remains very price inelastic. - Some households may suffer from imperfect market knowledge in long run or cannot change their habits – so demand remains very price inelastic. - Consideration of the magnitude of the change in elasticity (from -0.35 to -0.85); quite substantial in terms of doubling elasticity / or electricity demand still remains price inelastic in the long run as no suitable alternatives.	(8)
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Question Number	Indicative content	Mark
(e)	Knowledge 3, Application 3, Analysis 3 Policies may include: • Increase investment in training programmes to raise quantity and quality of human capital and productivity / increase provision of modern apprenticeship schemes / it may involve government subsidies or tax breaks to firms. • Recruit skilled workers from overseas via careers fairs and trade journals / provides a ready supply of labour. Accept policies referring to geographical mobility of labour if linked to the energy sector. • Change industry image so it appeals to more female school leavers and graduates – this may involve restructuring of careers advice / marketing programmes and information on career paths and opportunities. • Retain ageing workforce by improving working conditions and rates of pay / offer flexible working hours and part-time work / raise state retirement age; older workers have higher levels of human capital and so productivity could be increased. NB: For Level 3 response candidates must refer to at least one business policy and one government policy. NB: For Level 3 response candidates must refer to the energy sector.	(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 • Training programmes involve (opportunity) costs to businesses and government / time period to train labour, especially in higher order technical skills / quality of training programmes. • Recruitment of skilled workers from overseas may create problems such as access to UK jobs following Brexit decision / language barriers / differences in qualifications and skills to those required / possibility of higher staff turnover if overseas workers intend to return home / family ties and high house prices may create geographical immobility of labour. • Changing energy sector image may require high levels of marketing expenditure / some jobs may not suit parents with family commitments. • Retain older workers could lead to problems of poor health and low productivity and ability to learn new tasks. Also the underlying skilled labour shortage remains – eventually older workers will retire. • Other policies to overcome labour shortage for example, new technology to substitute labour with capital, means that reducing labour immobility is not a priority.	(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.

Q13.

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 <i>dominated by</i> a few firms, or <i>interdependent</i> (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)
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Question Number	Indicative content	Mark
(b)	Knowledge 2, Application 2, Analysis 4 Pricing strategies - must be linked to <i>profit</i>, 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 <i>profit</i>, 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 <i>profitability</i> of Starbucks.	(8)
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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)
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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)
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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.

Q14.

Question Number	Answer	Mark
(a)	The only correct answer is C <i>A is not correct because OP_1HQ_1 is the total cost of the product plus tax revenue producers' share of the tax</i> <i>B is not correct because P_2P_1HJ is the consumers' share of the tax</i> <i>D is not correct because P_3P_2JK is the producers' share of the tax</i>	(1)

Question Number	Answer	Mark
(b)	Knowledge 1, Application 1, Analysis 1 Knowledge/understanding 1 mark for correct definition of specific tax e.g. specific tax is a set amount per unit of the product sold Application 1 mark for e.g. of specific tax such as: • fuel duty • alcohol and tobacco duty • gambling duties • air passenger duty • sugar tax Analysis 1 mark for linked development e.g. to internalise the externalities accruing to the consumption of products causing external costs (1). Reference to 'sin taxes' (1). Raising revenue (1).	(3)

Q15.

Question Number	Answer	Mark
(a)	Application 2 Application 2: 1 mark for appropriate calculation /formula e.g. $\frac{1.3 \times \text{£}489\,000}{100} \quad (1)$ OR $489\,000 \times 0.013 \quad (1)$ Answer = £6 357 Award 2 marks for correct answer (6 360)	(2)

Question Number	Answer	Mark
(b)	The only correct answer is C A is not correct because the candidate has mistakenly done the average house price in North East of England to the average house price in London B is not correct because the candidate has made a computational error D is not correct because the candidate has made a computational error	(1)

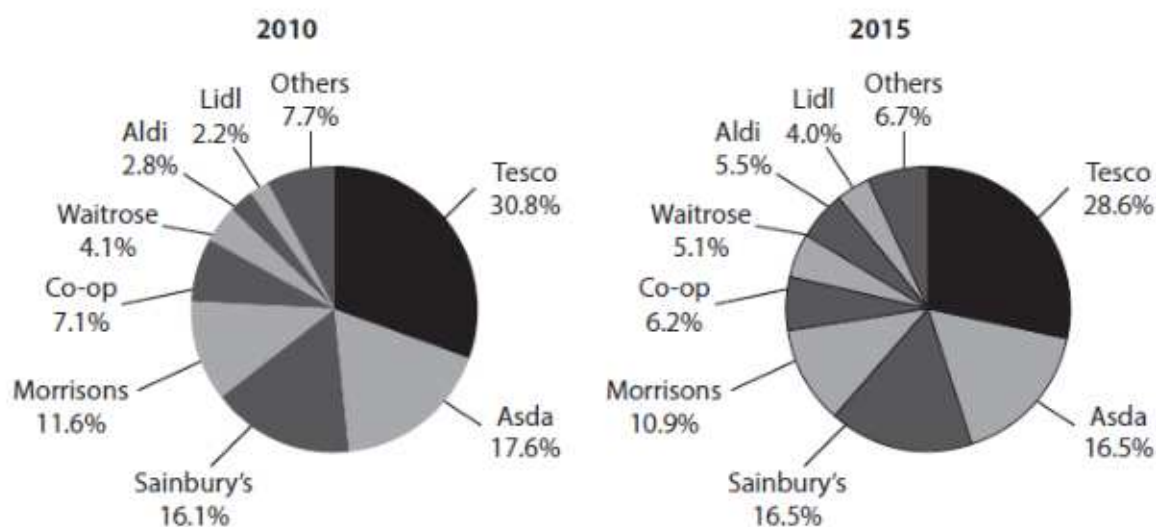
Question Number	Answer	Mark
(c)	Knowledge 1, Analysis 1 Knowledge / understanding: 1 mark for one reason e.g. • differences in average income or wealth (1) • employment or unemployment rates (1) • migration or population change (1) • foreign buyers (1) • availability of land to build on (1) Analysis: 1 mark for a linked development e.g. • Higher average income in London mean people are able to obtain larger mortgages and so pay higher prices (1) • Higher employment rate or lower unemployment rate in London mean greater demand for housing from its population (1) • Foreign buyers attracted to invest in London due to high rental returns or expectations of increase in value of property or better market knowledge (1) • Shortage of land to build on in London, especially with green belt restrictions (1)	(2)

Questions

Q1.

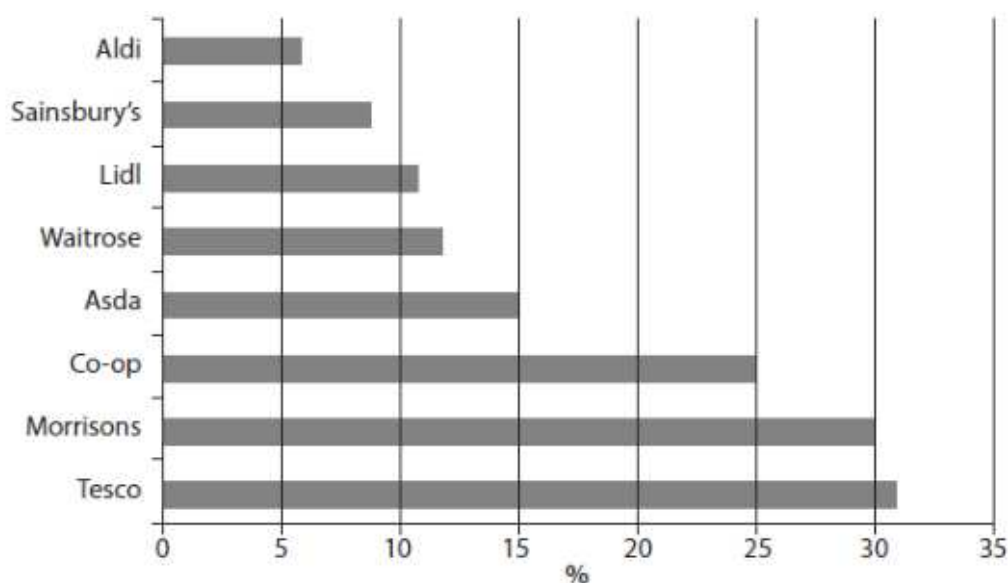
Supermarket price war, food waste and possible mergers

Figure 1: Market shares by total revenue in the UK supermarket sector, 2010 and 2015



(Source: Kantar worldpanel, <http://www.kantarworldpanel.com/en/grocery-market-share/great-britain/snapshot/11.10.15/>)

Figure 2: Proportion of food suppliers reporting that the following supermarkets fail to meet the Groceries Code of Conduct, 2015.



(Source: YouGov poll of more than 1100 food suppliers to supermarkets. Reported in The Times, 23 June 2015)

Extract A

Supermarket price war puts pressure on their food suppliers

The number of food suppliers (to supermarkets) struggling to remain in business has increased by more than 50% over the past year as supermarkets engage in an intense price war. It has never been tougher for the UK's food suppliers according to a study by accountants Begbies Traynor. It blames aggressive price-cutting by the supermarkets and delays in payments to food suppliers as the main causes of the difficulties. Further problems include food suppliers being forced to pay excessive amounts for packaging specified by supermarkets and funding in-store promotions. Almost 90% of struggling food suppliers are small and medium-sized businesses. 5

The price war has contributed to food prices paid by consumers falling by 1.7% over the past two years. 10

The market shares of the big four supermarkets – Tesco, Asda, Sainsbury's and Morrisons – are under pressure as shopping habits change. Many consumers are switching from one main weekly shop to shopping more frequently at local discount stores such as Aldi and Lidl or purchasing goods online from other grocery retailers. 15

The big four supermarkets have responded by putting more pressure on their suppliers despite an investigation by the Groceries Code Adjudicator (GCA). The GCA has the power to fine supermarkets up to 1% of their annual sales revenue if they break the Groceries Code of Conduct. A YouGov study found considerable differences between the supermarkets in meeting the Code with Aldi performing well but Tesco badly. Despite the Groceries Code, many food suppliers are reluctant to complain for fear of losing contracts with the supermarkets. 20

(Source: adapted from 'Supermarket price war takes toll on UK food suppliers'. Rupert Jones, The Guardian, 20th July 2015)

Extract B

Food waste in the supply chain

A report from the British Retail Consortium reveals that supermarkets are directly responsible for around 0.2 million tonnes of food waste every year. This is due to the expiry of use-by-dates and poor handling of stock.

However, 4.1 million tonnes of food waste occurs annually in the food supply chain before it even reaches the supermarkets, indicating the existence of information gaps. The supermarkets are cooperating with food suppliers and farmers to try to reduce this waste. This involves improving forecasts for supply and demand of food and increasing the reliability of transportation and storage. 5

Consumers, the final stage of the supply chain, waste a further 7 million tonnes of food each year. This suggests irrational behaviour. Supermarkets are also working with consumers to reduce the waste by providing advice on how to store and use leftover food. The development of packaging designs to keep food fresher for longer is one of the innovations under way to reduce waste. 10

(Source: adapted from 'Supermarkets tally up food waste bill'. Will Nicholls, in Businessgreen, 19th January 2015. <http://www.businessgreen.com/bg/news/2390792/supermarkets-tally-up-food-waste-bill>)

Extract C

Proposed merger activity in the supermarket sector

Analysts at Société Générale, an investment bank, have recommended a merger between Sainsbury's and Morrisons. They claim it would lead to increased economies of scale and market power for the combined business. Such a merger between the third and fourth largest supermarkets in Britain would have been unrealistic a few years ago due to concerns of its impact in reducing competition. However, the chances of getting permission from the Competition and Markets Authority have increased following the growth of Aldi and Lidl. Giant mergers have been approved in other sectors such as Lloyds-HBOS (banking) and British Telecom-EE (telecommunications).

5

The suggested merger would have its challenges. There is considerable overlap between the locations of the stores and the enlarged company would require the rationalisation and co-ordination of hundreds of thousands of employees. A new expensive IT system is likely to be required and the underlying difficult market trends would remain in the food retailing industry.

10

(Source: adapted from 'Tesco-bury and AS-Morrisons. Could Britain's supermarkets be about to merge?' Graham Ruddick, in The Telegraph, 16th December, 2015. <http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/11699724/Tesco-burys-and-AS-Morrisons.-Could-Britains-supermarkets-be-about-to-merge.html>)

(a) With reference to Figure 1 and Extract A, explain **one** likely reason for the change in the four-firm concentration ratio of the supermarket sector between 2010 and 2015.

(5)

(b) With reference to Figure 2 and Extract A, discuss the possible impact of supermarket monopsony power on both food suppliers and consumers.

(12)

(c) Examine measures the government might use to restrict the monopsony power of supermarkets.

(8)

(d) Assess the extent to which 'information gaps' (Extract B, lines 5 and 6) and 'irrational behaviour' (Extract B, line 11) are the main causes of food waste in the UK.

(10)

(e) Discuss the likely problems for Sainsbury's and Morrisons if the suggested merger between them goes ahead. Refer to Figure 1, Extract C and your own knowledge in your answer.

(15)

(Total for question = 50 marks)

Q2.

The table shows market data for e-cigarette kits. The original equilibrium price is £23.

Price £	Quantity demanded per month (000)	Quantity supplied per month (000)	New quantity demanded per month (000)	New quantity supplied per month (000)
25	5	9		
24	6	8		
23	7	7		
22	8	6		
21	9	5		

As a result of a successful advertising campaign, demand increased by 3 000 e-cigarette kits at all prices. At the same time production costs fell leading to an increase in supply of 1 000 e-cigarette kits at all prices.

(a) Calculate the new equilibrium price and quantity following the successful advertising campaign and the fall in production costs. Use the last two columns for your working. (4)

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(b) Research conducted in New Zealand in 2014 estimated the cross elasticity of demand for e-cigarettes to be 0.16 in response to changes in the price of tobacco. This implies that a 5% increase in the price of tobacco will cause the percentage change in demand for e-cigarettes to be: (1)

- ☒ A -31.25
- ☒ B -0.16
- ☒ C 0.8
- ☒ D 31.25

(Total for question = 5 marks)

Q3.

Between 2010 and 2015 the average price of tea in the UK increased from £7.20 per kilo to £8.48 per kilo. Over the same period the quantity of tea purchased fell from 97 million kilos to 76 million kilos.

(Source: <http://www.theguardian.com/lifeandstyle/shortcuts/2015/aug/05/brew-do-you-think-you-are-why-tea-needs-to-copy-coffee-in-order-to-survive>)

(a) Assume that the change in the quantity of tea purchased was only caused by the change in the price of tea. Calculate the price elasticity of demand for tea in response to the rise in its price. You are advised to show your working.

(2)

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(b) Calculate the change in total sales revenue for UK tea retailers between 2010 and 2015. You are advised to show your working.

(2)

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(c) Estimates for the demand for black tea in the UK suggest that it is an inferior good. This implies it has a negative:

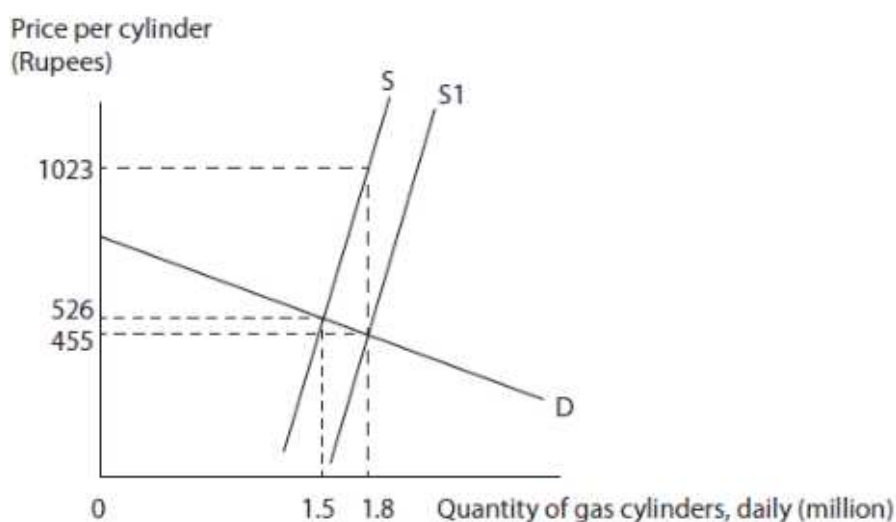
(1)

- ☐ A cross elasticity of demand
- ☐ B income elasticity of demand
- ☐ C price elasticity of demand
- ☐ D price elasticity of supply

(Total for question = 5 marks)

Q4.

The Indian government has introduced a subsidy on domestic cooking gas cylinders in the city of Mumbai. The diagram below shows the effect following the introduction of the subsidy.



(Source: <https://www.iocl.com/products/indanegas.aspx> and <http://indianexpress.com/article/business/business-others/lpg-subsidy-fixed-at-rs-568-price-to-change-after-march/>)

(a) Calculate the total domestic cooking gas subsidy paid daily by the Indian government. You are advised to show your working.

(2)

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(b) Calculate the percentage share of the total subsidy received by:

(i) consumers

(1)

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(ii) producers

(1)

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(c) One effect of the subsidy is to increase:

(1)

- ☒ **A** consumer surplus
- ☒ **B** market failure
- ☒ **C** public good provision
- ☒ **D** tax revenue

(Total for question = 5 marks)

Q5.

The following table shows the price and annual production of bags of Arabica coffee beans.

Year	Price per bag on 31 October	Quantity of coffee bean bags (millions)
2013	\$2.84	145
2014	\$4.98	145.2

(Sources: http://ycharts.com/indicators/world_coffee_arabica_price
<http://icocoffeeorg.tumblr.com/post/99916537525/coffee-season-2013-14-finishes-in-balance-but-deficit>)

(a) Calculate the price elasticity of supply of Arabica coffee bean bags between 2013 and 2014.

(2)

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(b) Explain what is likely to happen to the price elasticity of supply for coffee in the long run.

(2)

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(c) The price increase between 2013 and 2014 will:

(1)

- A** signal to producers that coffee has become less popular
- B** ration the good so that more can now afford to purchase it
- C** lead to producers substituting to alternative crop
- D** create an incentive for producers to grow more coffee

Answer

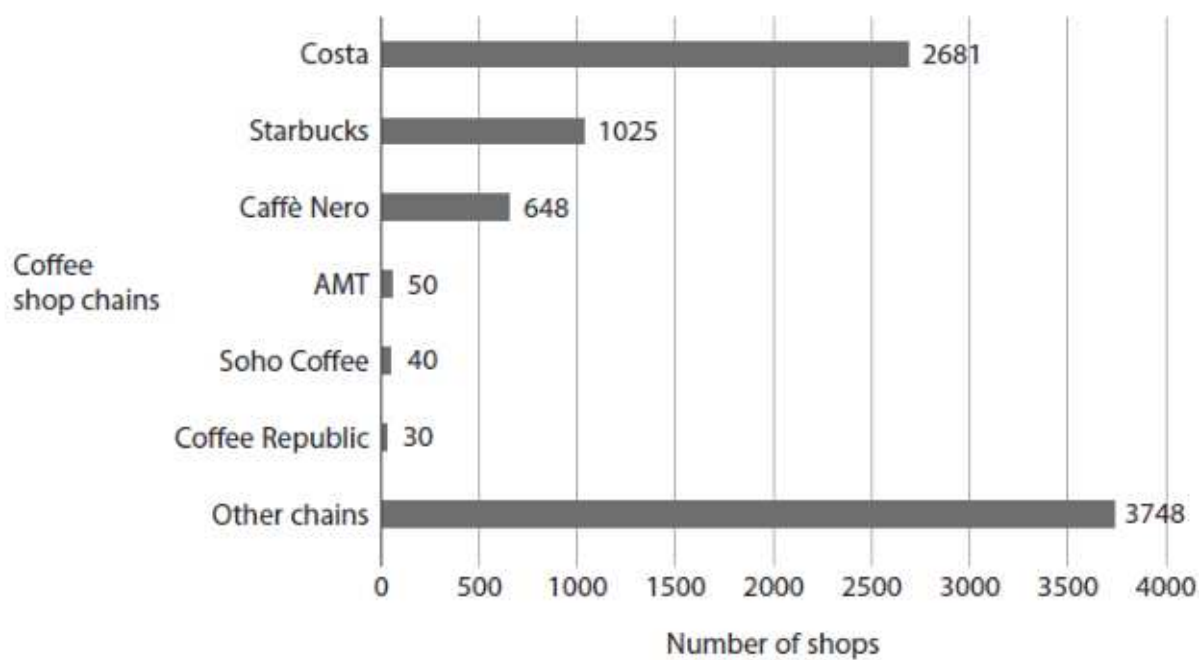
(Total for question = 5 marks)

Q6.

Read Figures 1 and 2 and extracts A and B before answering this question.

UK branded coffee shop chains market

Figure 1: Branded coffee shops by number of shops in the UK in 2021



(Source: adapted from <https://www.statista.com/statistics/297863/leading-coffee-shop-chains-in-the-united-kingdom-uk-store-number/>)

Figure 2: International coffee price (Arabica bean), US dollars per kilogram

Month	Price	Change
Jan 2020	3.13	–
Feb 2020	2.99	–4.47%
Mar 2020	3.27	9.36%
Apr 2020	3.41	4.28%
May 2020	3.30	–3.23%
Jun 2020	3.12	–5.45%
Jul 2020	3.24	3.85%
Aug 2020	3.60	11.11%
Sep 2020	3.67	1.94%
Oct 2020	3.35	–8.72%
Nov 2020	3.31	–1.19%
Dec 2020	3.48	5.14%

(Source: adapted from <https://www.indexmundi.com/commodities/?commodity=other-mild-arabicas-coffee&months=12>)

Extract A

Tough market conditions for coffee shops – but coffee quality is king

UK coffee shop chains have experienced slow growth opportunities and rising costs. In 2019 the UK market leader, Costa Coffee, opened over 60% fewer stores than in 2018, while Starbucks opened just three new stores overall in 2019.

By 2020, many costs were rising: staff shortages meant rising wages for baristas (trained coffeemakers), a 6.2% National Minimum Wage increase for over 25-year-olds and rising rents. 5

In a challenging UK economy, consumers placed coffee quality ahead of convenient location when choosing a coffee shop. This demonstrates the need for coffee shops to match rising expectations in the UK's increasingly crowded coffee shop market in order to stay competitive. Independent coffee shops (total 25 892 shops in 2020) remain a threat to the branded coffee shops as they pursue a unique luxury experience for customers. This will often focus on the atmosphere and customer service, luxury food and drink ranges and being a part of the local community. Independent coffee shops run on average profit as low as 2% of revenue, and many go out of business as new chains arrive in a locality. 10 15

In January 2020, Coca-Cola finalised its £3.9 billion takeover of market leader, Costa Coffee. The Coca-Cola company's stated aims are to maximise long-term returns to shareholders while being mindful of overall responsibilities such as supporting sustainable communities. Major brands, such as Costa, continue to lead coffee shop expansion in 2020 as competition intensifies. 20

(Source: adapted from <https://www.worldcoffeeportal.com/Latest/InsightAnalysis/2020/February/5-UK-coffee-shop-market-dynamics-to-watch-in-2020>)

Extract B

Greggs aiming for 'coffee shop experience'

Greggs is looking to increase its branded coffee shop market share after the British bakery chain achieved record profits and overtook Starbucks in the amount of coffee it served in the UK. Although Greggs will continue to focus on the food-to-go market, it will be investing in better coffee machines and providing WiFi. It wants one in three new outlets to have more seating. The company believes that it has the ability to take market share in two ways, by expanding its coffee range and at the same time enhancing the coffee shop experience. Greggs is modelling its plan on rival chain Pret A Manger, which has changed from focusing on food-to-go sales to mainly eating in. Greggs has transformed itself from an unremarkable seller of bread and pastries into one of the UK's most popular food-on-the-go chains, in part thanks to its embrace of vegan, gluten-free and healthy options as well as clever marketing that have changed its image.

(Source: adapted from Financial Times, 3 March 2020 <https://www.ft.com/content/6fb6d73a-5d24-11ea-8033-fa40a0d65a98>)

- (a) With reference to Figure 1, calculate the three-firm concentration ratio for branded coffee shop chains. (5)
- (b) With reference to Figure 2 and your understanding of price elasticity, examine **two** factors that may cause significant changes in the international price of coffee beans. (8)
- (c) Profit maximisation is assumed to be the business objective of most firms. With reference to Extract A, assess whether this is the case for coffee shop owners. (10)
- (d) Using a cost and revenue diagram, discuss the likely impact of 'rising costs' for coffee shops on their profitability (Extract A, line 2). (12)
- (e) With reference to the information provided, discuss whether the coffee shop market is contestable. (15)

(Total for question = 50 marks)

Q7.

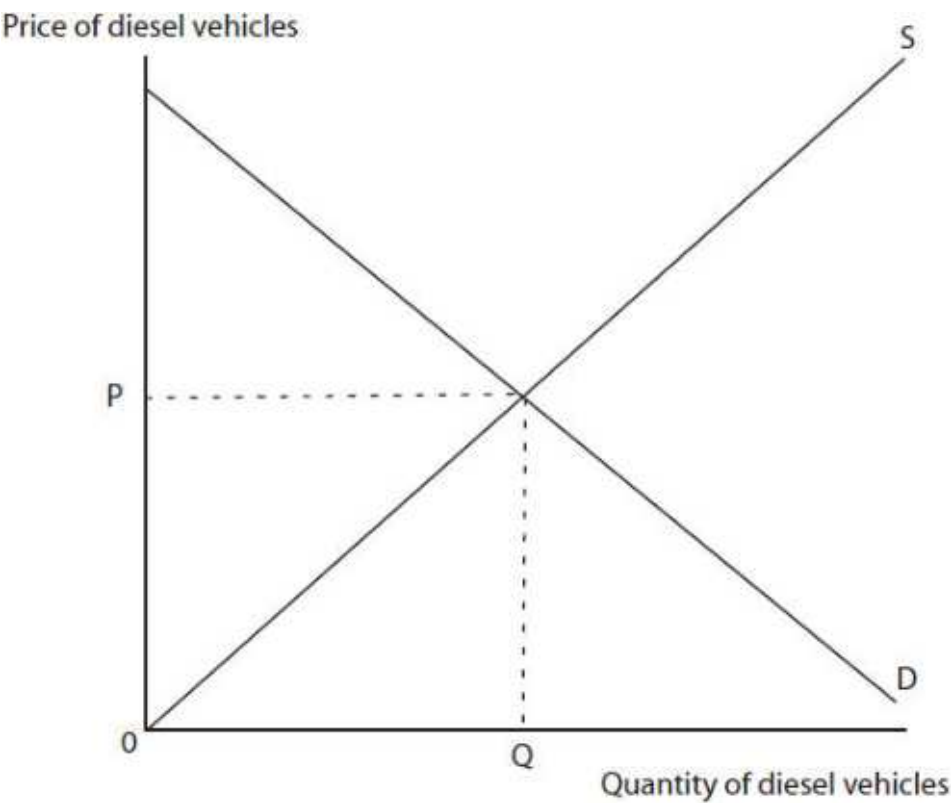
Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.

The consensus that diesel emissions are bad for health has led to many cities planning to ban diesel vehicles from their centres. The mayors of Paris, Mexico City, Madrid and Athens have said they intend to ban these vehicles by 2025.

(Source: adapted from <http://www.autoexpress.co.uk/car-news/consumer-news/98747/diesel-ban-clean-air-zone-expansion-could-see-diesel-cars-charged-to>)

(a) Annotate the diagram to show the change in consumer surplus in the market for diesel vehicles, following the change in demand caused by the proposed 2025 ban in some city centres.

(2)



(b) A ban on diesel vehicles in city centres will reduce the demand for diesel fuel. This is because:

(1)

- ☒ **A** consumers are irrational
- ☒ **B** consumers expect the price of diesel to rise
- ☒ **C** the goods are complements
- ☒ **D** the goods are substitutes

(c) Define the term 'demand'.

(1)

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(Total for question = 4 marks)

Q8.

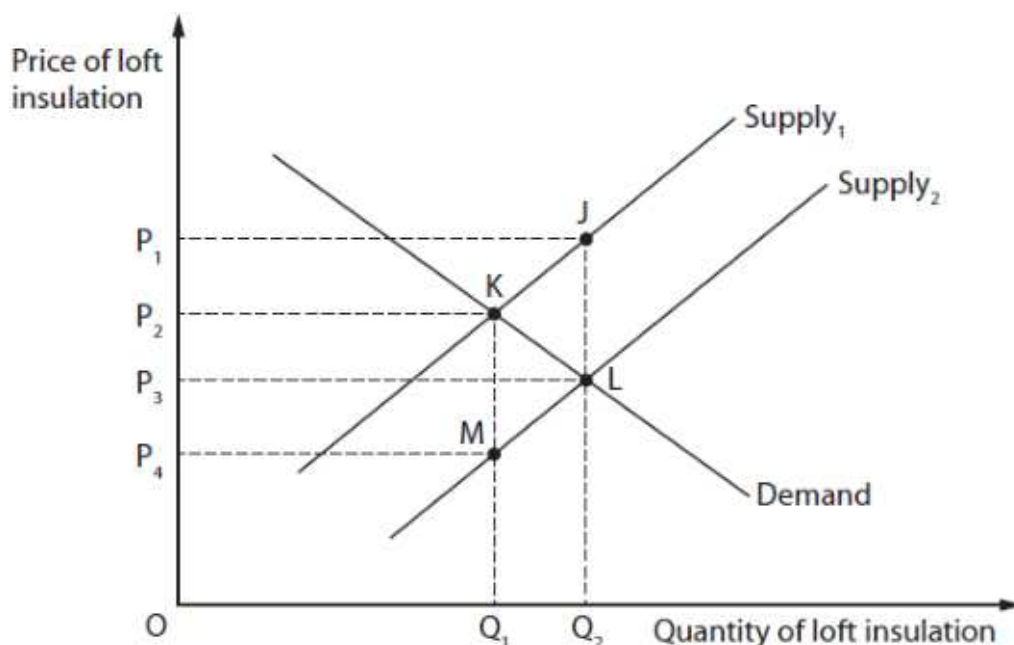
Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.

Answer the question with a cross in the box you think is correct ☐. If you change your mind about an answer, put a line through the box ☐ and then mark your new answer with a cross ☐.

The 'Energy Company Obligation' is the government's term for its programme to make houses in the UK more energy efficient.

(a) In the diagram below, the government grants a subsidy to energy suppliers to install loft insulation.

This shifts the market supply curve for loft insulation from Supply_1 to Supply_2 .



The total amount spent by the government on subsidies is represented by the area:

(1)

- ☒ A OP_1JQ_2
- ☒ B OP_3LQ_2
- ☒ C P_3P_1JL
- ☒ D P_4P_2KM

(b) Explain an opportunity cost to the government of granting subsidies to energy suppliers to install loft insulation.

(3)

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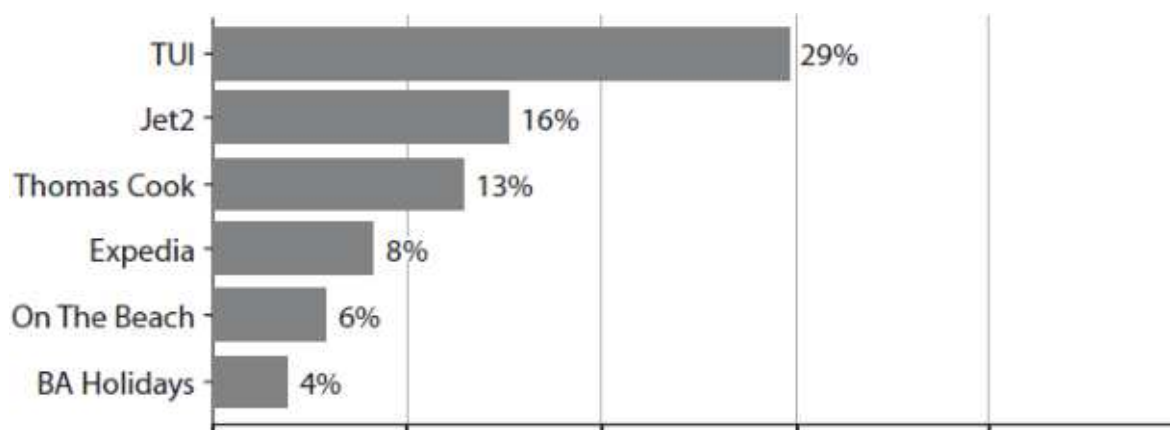
(Total for question = 4 marks)

Q9.

Read Figures 1 and 2 and the following extracts (A to C) before answering this question.

The travel and tourism industry

Figure 1: Package holiday market share of the six largest providers, booked by UK residents, 2019



(Source adapted from: <https://knowledge.sharescope.co.uk/2019/10/16/finding-companies-that-control-their-own-destinies/The Times/ATOL>)

Figure 2: Jet2 package holiday prices to Sorrento

Price before Thomas Cook shutdown	Price 12 hours after Thomas Cook shutdown
2 Adults for 7 Nights from Monday 25 May 2020 🍴 Half Board 🛏 1 x Premium Double or Twin room ✈ Return flights from Edinburgh View flight times 🧳 22 kg Bag Allowance 🧳 10 kg Hand Baggage 🛡 ATOL Protected 🚗 Coach Transfers Holiday price from £1,576 Per person price £788	2 Adults for 7 Nights from Monday 25 May 2020 🍴 Half Board 🛏 1 x Premium Double or Twin room ✈ Return flights from Edinburgh View flight times 🧳 22 kg Bag Allowance 🧳 10 kg Hand Baggage 🛡 ATOL Protected 🚗 Coach Transfers Holiday price from £1,648 Per person price £824

Data accessed: 22nd and 23rd September 2019

Extract A

Marginal productivity of cabin crew

Cabin crew are responsible for loading passengers and providing in-flight meals. United Airlines is planning to reduce the number of its cabin crew members onboard international flights. The airline currently operates its planes with one more cabin crew member than its competitors. The marginal productivity of this additional crew member may be low. By reducing the number of its cabin crew members United Airlines will be able to operate more efficiently and compete more effectively.

5

(Source adapted from: <https://simpleflying.com/united-airlines-to-reduce-number-of-crew-on-international-flights/>)

Extract B

Thomas Cook's environmental impact

Thomas Cook Group plc's operations included its airline and 560 high street travel agents providing flights, hotels and package holidays.

The environmental impact of the travel industry is significant. It accounts for 8% of all global carbon emissions. Thomas Cook recognised the risks presented by climate change and actively engaged in reducing their airline emissions. Its plans included using more efficient aircraft and using lower-carbon fuel. In 2018, Thomas Cook was included in the top 10 of the world's most fuel-efficient airlines. 5

(Source adapted from: https://www.thomascookgroup.com/investors/insight_external_assess/Thomas+Cook+Sustainability+Report+2018.pdf)

Extract C

Why did Thomas Cook shut down?

Thomas Cook Group plc ceased trading on 23 September 2019. The collapse of Thomas Cook left 600 000 travellers stranded overseas and approximately 21 000 worldwide employees were left without a job.

Thomas Cook's management said that the failure of rescue talks between banks, shareholders and the UK Government meant it had no choice but to shut down the business. 5

But in truth the tour operator's problems go back much further. A disastrous merger in 2007, increased debts, the internet revolution in holiday booking and Brexit uncertainty all contributed to the failure of the business. 10

In 2007 it merged with MyTravel. Thomas Cook directors had an objective of rapid company growth over short-term profitability. The merger was supposed to create a European giant, promising £75 million-a-year cost savings and a springboard to challenge emerging internet rivals. In reality, Thomas Cook was merging with a company that had only made a profit once in the previous six years, and the deal left the Group with huge debts. In May 2019, the firm reported a £1.5 billion loss. 15

The role of the management in Thomas Cook's collapse is being investigated by the UK Government. Thomas Cook executives' salaries and bonuses have been questioned. Directors received salaries totalling £20 million in the five years before its collapse. The Chief Executive Officer (CEO) earned a £500 000 cash bonus in 2017 and about £8.5 million in his five years with the company. It seems that around £4 million of this was in the form of shares. The share price reached £1.46 in 2018, but each share is now worthless. 20

The CEO said that the directors had worked "exhaustively" to rescue Thomas Cook and create a long-term turnaround strategy. "It is a matter of profound regret to me and the rest of the board that we were not successful." 25

The UK prime minister admitted that the government refused to grant £150 million as a subsidy to help rescue Thomas Cook in the short run. The UK prime minister stated: "Clearly, that is a lot of taxpayers' money and sets up, as people will appreciate, a moral hazard in the case of future such commercial difficulties that companies face. I have questions about whether it's right that the directors, or whoever, the board, should pay themselves large sums when businesses can go down the tubes like that. One is driven to reflect on whether the directors of these companies are properly incentivised to sort such matters out". 30

(Source adapted from: <https://www.theguardian.com/business/2019/sep/23/thomas-cook-as-the-world-turned-the-sun-ceased-to-shine-on-venerable-tour-operator> and <https://www.ft.com/content/a7dd2554-de23-11e9-b112-9624ec9edc59>)

(a) Explain the likely impact of diminishing marginal productivity of labour on cabin crew staffing levels. Refer to Extract A in your answer.

(b) Examine the likely impact of Thomas Cook's plan 'to reduce their airline emissions' (Extract B, line 6) on the social optimum position. Use an appropriate externalities diagram in your answer.

(8)

(c) With reference to Extract C, assess whether Thomas Cook's failure was caused by the principal-agent problem.

(10)

(d) With reference to Extract C, discuss the proposed government subsidy to prevent Thomas Cook from reaching its shut-down point.

(12)

(e) With reference to the information provided, discuss the decision by Jet2 to increase its package holiday prices.

(15)

(Total for question = 50 marks)

Q10.

(a) Define the term 'external benefits'.

(1)

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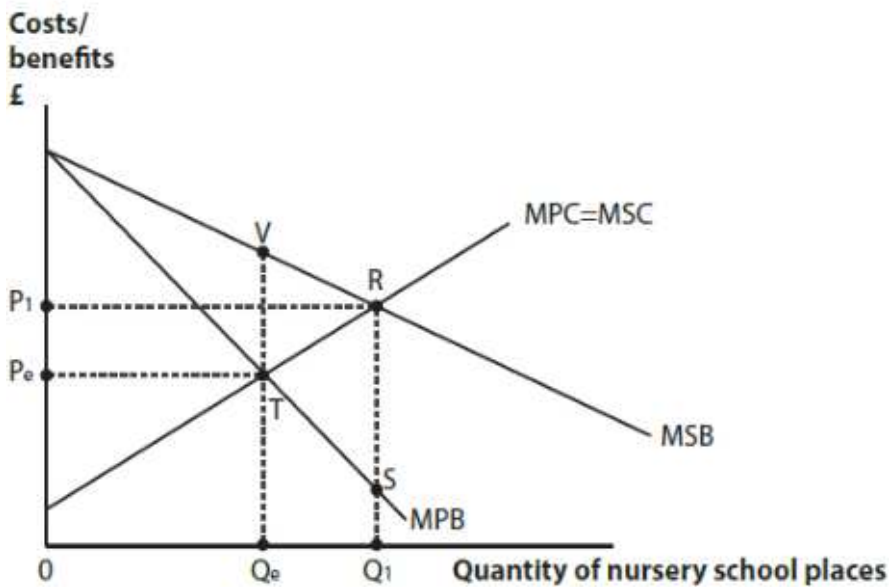
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Diagram A shows the market for nursery school places.

Diagram A



(b) Which **one** of the following measures could a government introduce to achieve the social optimum consumption of nursery school places?

It could introduce a:

(1)

- ☒ **A** maximum price of $0P_1$ per unit
- ☒ **B** subsidy of RS per unit
- ☒ **C** tax of VT per unit
- ☒ **D** minimum price of $0P_1$ per unit

(c) Annotate on Diagram A the welfare gain area and the new social optimum output resulting from successful government intervention in the market for nursery places.

(2)

(Total for question = 4 marks)

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)	Application 2, Knowledge 2 Application: Accurate insertion of data in both columns in table (either fully or as far as the new equilibrium). (1+1 marks) <table><tr><th>Price £</th><th>Quantity demanded per month (000)</th><th>Quantity supplied per month (000)</th><th>New Quantity demanded per month (000)</th><th>New Quantity supplied per month (000)</th></tr><tr><td>25</td><td>5</td><td>9</td><td>8</td><td>10</td></tr><tr><td>24</td><td>6</td><td>8</td><td>9</td><td>9</td></tr><tr><td>23</td><td>7</td><td>7</td><td>10</td><td>8</td></tr><tr><td>22</td><td>8</td><td>6</td><td>11</td><td>7</td></tr><tr><td>21</td><td>9</td><td>5</td><td>12</td><td>6</td></tr></table> Knowledge/understanding: Calculation of new equilibrium price of £24 (1) and quantity of 9 000 (1) NB do not award for quantity of 9 Award full marks for £24 and 9 000	Price £	Quantity demanded per month (000)	Quantity supplied per month (000)	New Quantity demanded per month (000)	New Quantity supplied per month (000)	25	5	9	8	10	24	6	8	9	9	23	7	7	10	8	22	8	6	11	7	21	9	5	12	6	(4)
Price £	Quantity demanded per month (000)	Quantity supplied per month (000)	New Quantity demanded per month (000)	New Quantity supplied per month (000)																												
25	5	9	8	10																												
24	6	8	9	9																												
23	7	7	10	8																												
22	8	6	11	7																												
21	9	5	12	6																												

Question Number	Answer	Mark
(b)	C	(1)

Q3.

Question Number	Answer	Mark
(a)	Application 2 Application: 1 mark for applying the formula and 1 mark for the correct answer $-21.65\% \div 17.78\% (1) = -1.2 (1)$ Correct calculations of both percentages accept (-) 0.217 and (-) 0.178 = 1 mark NB if the answer given is -1.2 or 1.2, award 2 marks	(2)

Question Number	Answer	Mark
(b)	Knowledge 1, Analysis 1 Knowledge/understanding: 1 mark for original and new sales revenue Original sales revenue: £7.20 × 97 million = £698.4 million New sales revenue: £8.48 × 76 million = £644.5 million Analysis: 1 mark for the change in revenue: -£53.9 million (accept close approximation, for example a fall of £54 million) NB if the answer given is -53.9m/53.9m award 2 marks (this may be stated as -7.7% or 7.7%) NB If million is missing from the answer award up to 1 mark	(2)

Question Number	Answer	Mark
(c)	B	(1)

Q4.

Question Number	Answer	Mark
(a)	Application 2 Application: 568 × 1.8 million (1) Accept 1022 million or 1022.4 million for 2 marks. Accept 1,022,400,000 NB If million is missing from the answer award up to 1 mark	(2)

Question Number	Answer	Mark
(b)	Application 2 Application: 1 mark for the percentage of subsidy for consumers: $71 \div 568 \times 100 = 12.5\%$ (1) 1 mark for the percentage of subsidy received by producers: $497 \div 568 \times 100 = 87.5\%$ (1) Award 1 mark if the answers are transposed NB if no correct calculations, award up to 1 mark for: correct annotation of diagram depicting consumer and producer subsidy areas OR the actual consumer subsidy per unit (71 rupees) and producer subsidy per unit (497 rupees) OR consumer subsidy (127.8 million rupees) and Producer subsidy (894.6 million rupees)	(2)

Question Number	Answer	Mark
(c)	A	(1)

Q5.

Question Number	Answer	Mark
(a)	Application 2 Application: 1 mark for calculating both the percentage change in quantity and the percentage change in price and 1 mark for correct answer Percentage change in quantity = $0.2/145 \times 100 = 0.1$ (1) Or Percentage change in price = $2.14/2.84 \times 100 = 75.4$ (1) PES = $0.1/75.4 = 0.0$ (1) NB if the answer given is 0 to 0.002 award 2 marks.	(2)

Question Number	Answer	Mark
(b)	D	(1)

Question Number	Answer	Mark
(c)	Knowledge 2 Knowledge: 1 mark for identifying that is likely to become more elastic and 1 mark identifying why, e.g. The price elasticity of supply will become more elastic (1) as coffee growers will be able to respond by planting more coffee which will increase supply in the long run (1).	(2)

Q6.

Question Number	Answer	Mark
(a)	Knowledge 1, Application 2, Analysis 2 Three-firm concentration ratio is the sum of the largest market share of the biggest three firms as a proportion of the whole market (1) Calculations e.g. • $2681+1025+648 = 4354$ (1) • $50+40+30+3748 = 3868$ (1) • 8222 (1) • $4354/8222$ (1) = 0.53 Answer = 52.96% Award 5 marks for correct answer (52.96) N.B. allow 52-53 or 0.53:1 (5) N.B. Maximum of 4 marks if no correct answer given e.g. 0.53 (4)	(5)

Question Number	Answer	Mark
(b)	Knowledge 2, Analysis 2, Application 2, Evaluation 2 Knowledge/understanding: 2 marks (1+1) e.g. • Acknowledgement of price inelastic demand (1) • Acknowledgement of price inelastic supply (1) • Non-price determinants of demand (1) • Non-price determinants of supply (1) • Cross price elasticity of demand (1) Analysis: 2 marks for linked explanation (1+1) e.g. • Speculative demand, change income, taste and preference (1) • Supply chain failure/ harvest failure/weather/seasonality (1) • Price inelastic demand, lack of close substitutes, small proportion of income, necessity (1) • Price inelastic supply – time-lags with supply, storage problems (1) • Closure of cafés/farms/freight in 2020 (1) Application: 2 marks with at least 1 mark for reference to Figure 2 e.g. • May 2020 price falls 3.23% (1) • April 2020 price rises 4.28% (1) • Between April and May 2020 price moved by 7.51 percentage points (1) • Price falls from \$3.13 (Jan 2020) to \$2.99 (Feb 2020) (1+1) • Price rises \$2.99 (Feb 2020) to 3.27 (March 2020) (1+1) • Average price = \$3.32 (2) • Coffee crop harvest failure (1) • Coffee addictive (1) NB allow up to 2 marks for diagram that enhances the written explanation elsewhere	(8)

	Evaluation: 2 marks for two evaluative comments, OR 2 marks for identification and linked development of one evaluative comment e.g. • Depends upon the degree of price elasticity of demand when supply shifts (1) • Depends upon the degree of price elasticity of supply when demand shifts (1) • Use of buffer stocks (1) brings price stability (1) • Transitory changes (1) short-term shocks of disappear over-time (1) • Futures market (1) dampens price instability/removes volatility (1) • Easy to store (1) and therefore to release if there was a poor harvest (1) • Short-run/long-run (1) NB award a maximum of 6/8 if no reference to Fig 2 and/or price elasticity	
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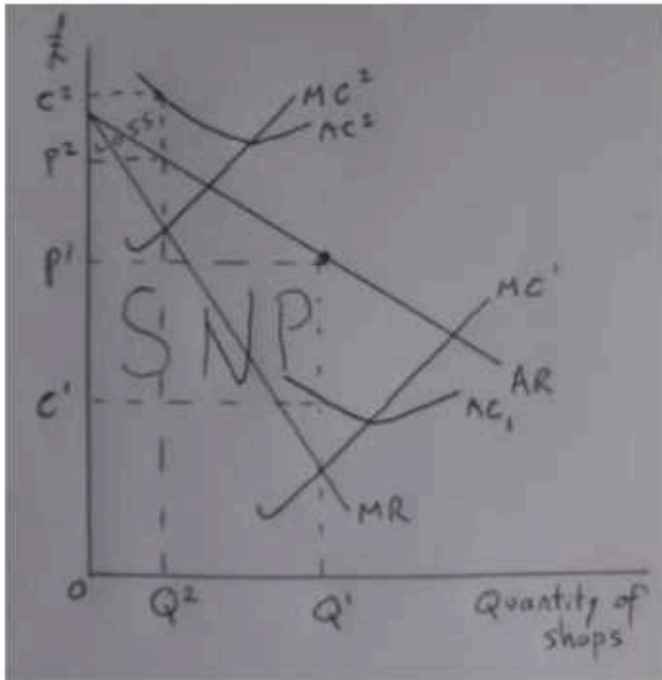
Question Number	Indicative content	Mark
(c)	Knowledge 2, Application 2, Analysis 2 • Profit maximisation for owners/shareholders, $MC=MR$ • Revenue maximisation for managers, $MR = 0$ • Sales Maximisation to increase market share, $AC=AR$ • Limit pricing by Costa • Profit satisficing by Independents • Coffee quality lowers profit • Relocating may allow more profit • Competitive market makes survival top objective • Unique premium experience lowers profits NB Allow use of diagrams to explain the above NB: For Level 3 response candidates must refer to coffee shops NB: Alternatives to profit maximisation may be seen as KAA and profit maximisation as evaluation or 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
(c) continued	Evaluation 4 • Short-term objectives used to achieve long-term profitability e.g. better quality coffee raises costs • Use of profit satisficing to achieve other objectives e.g. customer satisfaction or environmental goals • Difficulty calculating precisely profit maximisation position • Depends on owners – Costa Coffee change in ownership change in objectives • Depends on owners - independent owners aim for normal profit/survival/Coca Cola support sustainable communities • Divorce of ownership and control/principal agent problem	(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 Profitability definition Profitability decreases • Increase in advertising/rent/wages (Fixed Cost) shifts AC upwards • Increase in price of coffee beans/wages (Variable Cost) shifts AC and MC upwards • Loss area/smaller profit connected with $MC=MR$ • Slow-down opening new outlets in 2020 • Short-term (AVC) or long-term (AC) shut down point • Coffee shops labour intensive	

	• Diagram e.g.  NB: For Level 3 response candidates must refer to coffee shops. Must have an accurate diagram. NB Allow diagrams showing e.g. rise in fixed costs only, constant returns to scale. NB Profitability not decreasing can be seen as EV and decreases as evaluation or vice versa	(8)
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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
(d) continued	Evaluation 4 Profitability does not decrease • Coffee bean costs very volatile • Coffee small proportion of total cost • Rent/labour high proportion of total cost • Profit also determined by revenue • Insufficient information • Prioritisation of reasons • 2020 closures due to external factors • Long-term changes e.g. price of property falls • Absorb costs • Change in market structure – firms exit • Collude/inter-dependence • Change in revenue • Diversify into new product or geographical markets e.g. US	(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 Contestable meaning e.g. low barriers to entry or exit or low sunk costs The market is contestable because: • low barriers to entry e.g. - low start-ups costs as it is cheaper to rent shop floor - renting machines needed to make coffee rather than buying them - increasing threat of competition from independent coffee shops (Extract A line 11) - Greggs entry shows they just added chairs and menu range (Extract B line 5) • low sunk costs e.g. training baristas requires less expenditure • Coca-Cola takeover of Costa NB Coffee shop not being contestable can be seen as KAA and contestable as evaluation or vice versa NB for a Level 3 response there must be reference to the context of coffee shop market.	(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 The market is not contestable because: • high barriers to entry e.g. - highly concentrated market with 3-firm CR nearly 53% implying strong brand image, - collusion and economies of scale making it difficult for small independents to enter and grow • some firms may face high rent costs if they are seeking a larger shop floor/central location • high sunk costs - big chains have finance to spend on promotion and advertising that smaller independent coffee shops won't be able to	(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.

Q7.

Question Number	Answer	Mark
(a)	Application 2 Identify demand shifts left (1) Annotate or identify reduced consumer surplus (1) Price of diesel vehicles Quantity of diesel vehicles NB If the candidate shows an incorrect shift, but the new consumer surplus is correct, award 1 mark (2)	

Question Number	Answer	Mark
(b)	Knowledge 1 The only correct answer is C <i>A is not correct because irrational behaviour would suggest an increase in demand.</i> <i>B is not correct because if consumers expected price of diesel to rise they would increase demand for diesel.</i> <i>D is not correct because they are not rival products.</i> (1)	

Question Number	Answer	Mark
(c)	Knowledge 1 Knowledge 1 mark for definition, e.g. Amount consumers are willing and able to buy (1) Amount consumers buy at a particular price/period of time (1)	(1)

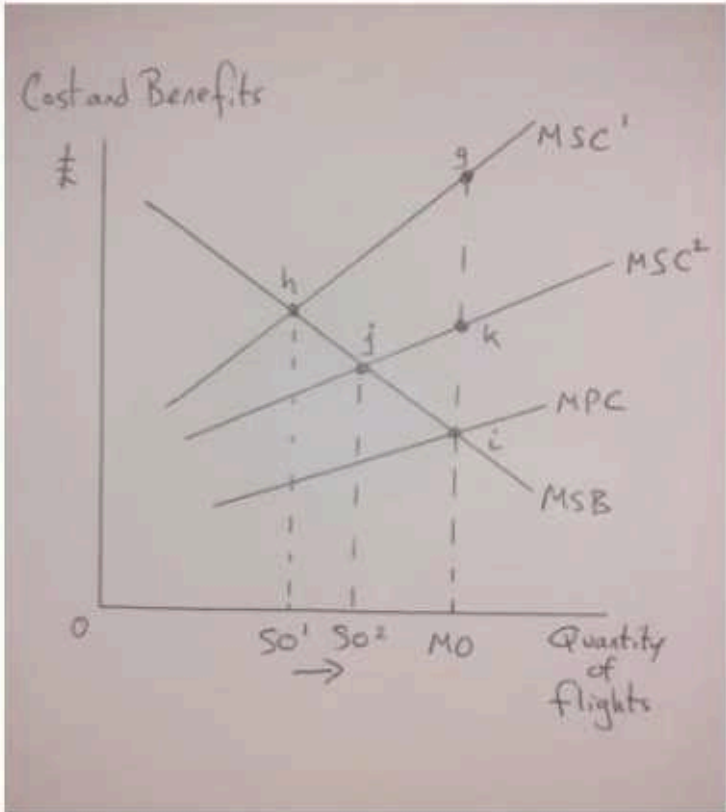
Q8.

Question Number	Answer	Mark
(a)	The only correct answer is C <i>A is not correct because the supply curve shift has been ignored</i> <i>B is not correct because this is the cost to the consumer</i> <i>D is not correct because this is the total amount received by the producer</i>	(1)

Question Number	Answer	Mark
(b)	Knowledge 1, Application 1, Analysis 1 Knowledge/Understanding 1 mark for identification of opportunity cost e.g. the next best alternative forgone. Application 1 mark for specific reference to government spending e.g. schools and hospitals. Analysis 1 mark for analysis of problem e.g. the economic and social case for a subsidy should be judged carefully on the grounds of efficiency and fairness. Government subsidies inevitably carry an opportunity cost and in the long run there might be better ways of saving energy.	(3)

Q9.

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) • CO₂ emissions per passenger declines (1) quantity of flights increases (1)	
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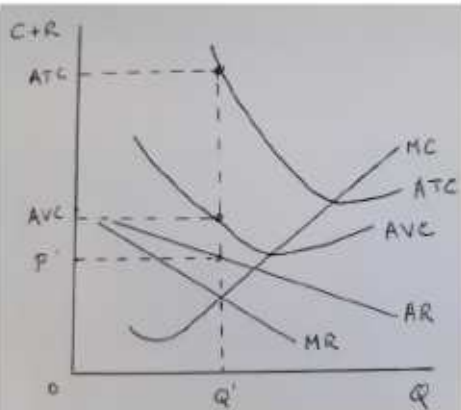
	NB These application points may be annotated on the diagram. Evaluation: 2 marks for two evaluative comments, OR 2 marks for identification and linked development of one evaluative comment e.g. • Difficulty in measuring size of negative externality (1) third party effects (1) • CO₂ emissions from travel agents, hotels and holiday activities increase/remain high (1+1) • Computational problems in measuring CO₂ emissions from planes (1) faulty industry data (1)	(8)
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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 satisfy 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.

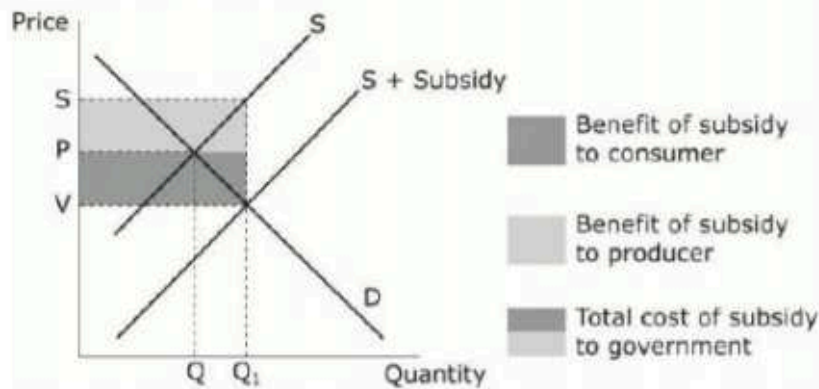
Question Number	Indicative content	Mark
(c) continued	Evaluation 4 Case against 'principal agent problem' - Employee share-ownership schemes address the problem. £4m of the CEO's £8.5m earning is in shares – so as an employee he is motivated by profit maximisation, bringing him in-line with shareholders. 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

Incidence of a Subsidy



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.

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)
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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% of revenue • Rising marginal costs for Jet2 to reduce CO₂ emissions/ buy more fuel to new destinations/ costly take overs. NB KAA may be used as EV and vice-versa.	
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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.

Q10.

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 Q₁ or R or S (1)	(2)