

PEARSON EDEXCEL A-LEVEL ECONOMICS B • 9EB0

ECONOMICS



EXAM QUESTION PACK

1.5 MARKET FAILURE AND GOVERNMENT INTERVENTION

MARKET FAILURE

SCORE

/775

PERCENTAGE

%

STEMUP

These questions belong to Pearson Edexcel, not to us.

The examination questions and mark schemes in this pack were written and published by Pearson Edexcel. They are past assessment materials, reproduced here so that students can revise from them.

What we do not own

STEMUP is not affiliated with Pearson Edexcel and does not own, and makes no claim to own, any of the question or mark scheme material in this pack. Pearson has not endorsed, approved or been involved in the production of it. Pearson, Edexcel and the qualification titles used here belong to their respective owners and appear for identification only.

Where to find the originals

Pearson publishes its past papers and mark schemes free of charge. Always check the current specification at [qualifications.pearson.com](https://www.pearson.com/qualifications) before you revise, because content and wording can change between series.

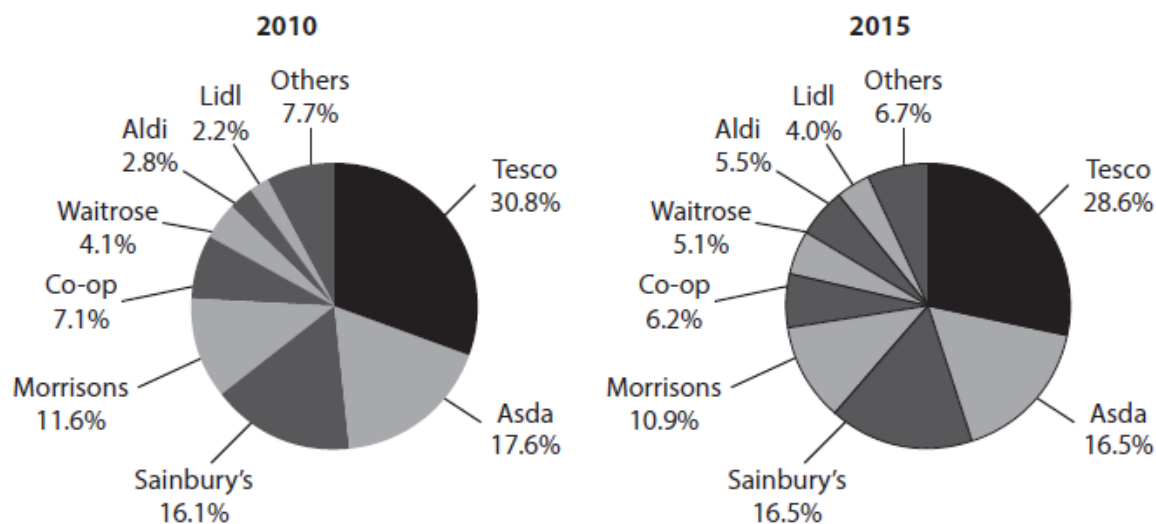
If you hold the rights to any material in this pack and would like it amended or removed, contact admin@stemup.co.uk and we will act on it.

Questions

Q1.

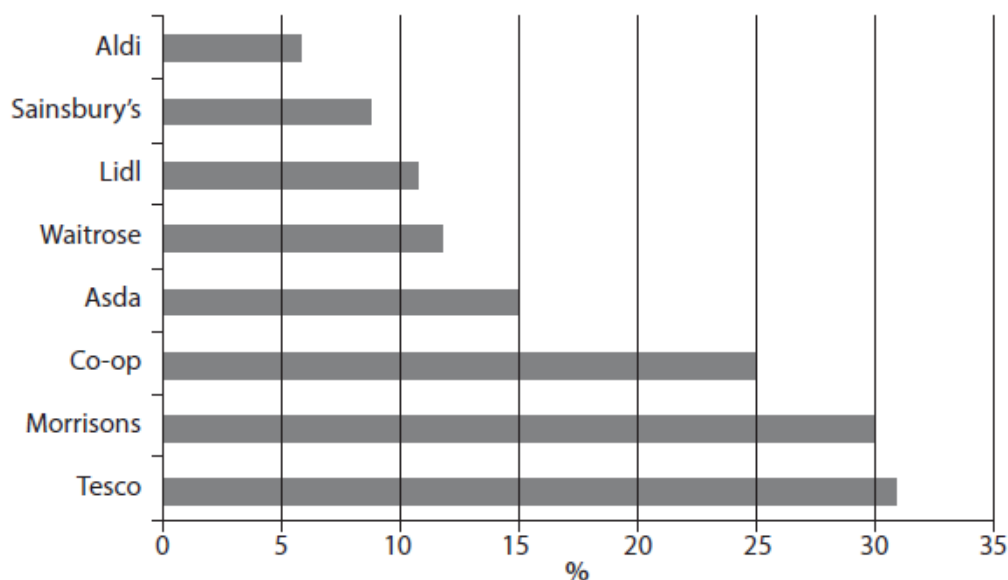
Supermarket price war, food waste and possible mergers

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.

Chile

Figure 1: Copper prices, US dollars per tonne, 2007-2015



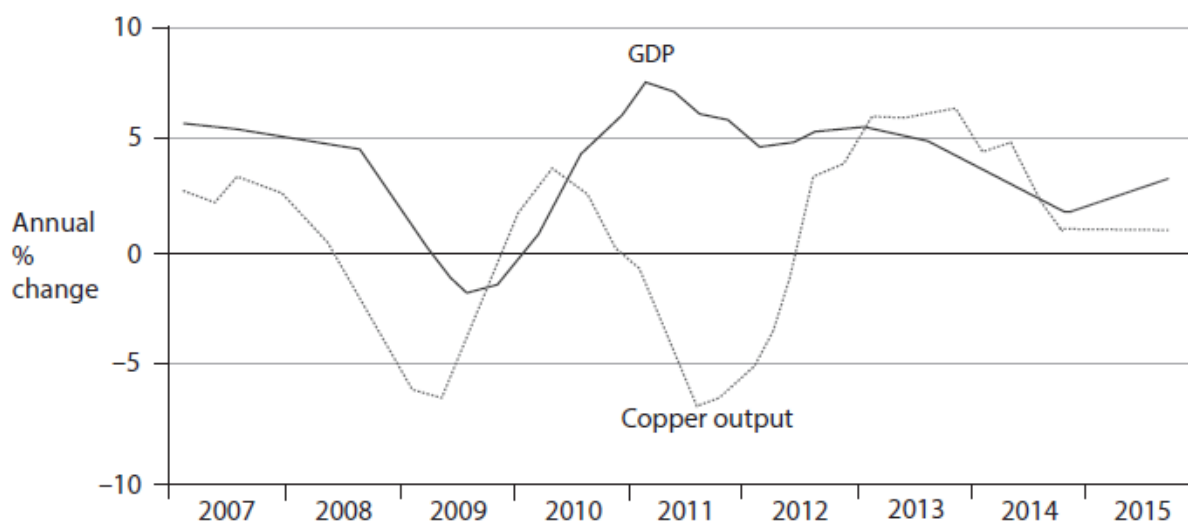
(Source: adapted from <http://www.indexmundi.com/commodities/?commodity=copper&months=120>)

Figure 2: US dollar per 100 Chile pesos exchange rate, 2007-2015



(Source: <https://www.google.co.uk/finance?q=CLPUSD&ei=OGEvVun-AoulU6awjugF>)

Figure 3: Chile: copper output and real GDP growth, 2007-2015



(Source: adapted from FT.com sources below)

Extract A

Chile's economic outlook brightens

Chile has been hit hard by a worldwide fall in commodity prices since 2011. Copper accounts for 20% of Chile's GDP and 60% of its exports; one third of the world's copper is produced by Chile. China purchased 40% of the world's copper, so a slowdown in China combined with increased global over-supply has meant copper prices have collapsed (see Figure 1). Chilean government income from copper exports had reached \$11.5 billion a year before copper prices fell, but now tax revenues from this source have fallen drastically. Growing numbers of copper mines struggle to break even at current prices.	5
Chile's GDP is now growing, helped by a weak currency that has boosted export industries outside the mining sector, such as its successful wine and salmon industries. There are strengths in tourism and high-tech products. Public services are good in Chile, and poverty rates have been falling fast. On top of this, a large and diversified financial sector with high domestic savings provides a useful safety net, given high levels of corporate debt and the government's need to finance a fiscal deficit of 3% of GDP.	10 15
Chile's economy is often regarded as the best run in the region. This is attributed to the credibility of its financial institutions, relatively low levels of national debt (about 15% of GDP) and its free-trade model, which is unrestricted by government interventionism that has distorted the economies of countries such as Argentina and Venezuela. "Chile is an example of how credible institutions can smooth the economic cycle and make adjustments less traumatic," said Mr Valdés, the minister of finance in Chile, pointing to its widely respected and independent central bank and a well-established fiscal rule that give officials the freedom to implement counter-cyclical policies.	20
However, there are worries that without enough spare capacity in the economy, expansionary fiscal and monetary policies could end up increasing inflation rather than economic growth. Meanwhile monetary policy is restricted by inflation that has reached 5%, well outside the central bank's 2–4% target range, fuelled by a weaker exchange rate. Crucially, investment remains low because of uncertainty over the outcome of the Prime Minister's reforms, which are aimed at reducing inequality. A recent rise in corporation tax from 20% to 25% and labour market reforms that strengthen the power of trade unions may have a negative effect on business confidence.	25 30
Despite a "mildly contractionary" budget, Valdés insisted that the government would continue with costly reforms. Increased taxes on those on higher incomes are considered by the government to be necessary to sustain economic development in Chile. "We do want to change society, while recognising all the good things that have been done in the past 25 years," said Mr Valdés, referring to an average growth rate of 5.3% over the past three decades, but under 2% in 2015. There is broad consensus that investment in education is the key to unlocking Chile's growth potential.	35

(Sources: adapted from <http://www.ft.com/cms/s/0/89926ce8-df96-11e4-a6c400144feab7de.html#axzz3pCnzT3PC> FT 20 April 2015 and <http://www.ft.com/cms/s/0/d60ac2b2-7453-11e5-a129-3fcc4f641d98.html?siteedition=uk#axzz3pCnzT3PC> FT 19 October 2015 and <http://www.ft.com/cms/s/0/d60ac2b2-7453-11e5-a129-3fcc4f641d98.html?siteedition=uk#axzz3pCnzT3PC> FT 19 October 2015 all by Benedict Mander)

Extract B

Chile's copper mining on a downward track

There was a time when investing in Chilean mining meant guaranteed success. After 1990, when military rule was replaced by an elected government, market reforms and restored relations with the US and UK meant foreign companies were keen to exploit vast copper reserves. The existence of large copper reserves in a stable country with a business-friendly government is rare, making Chile much more attractive to investors than countries such as Zambia.	5
By mid-2015, however, the copper price hit a six-year low. Chilean mines are becoming less productive. After 20 years of heavy digging, the ore is lower grade, and much further down. The deeper pits take longer to mine, and use more fuel. Wages are high, and trade unions are powerful. A mining truck driver earns \$70 000 a year, \$10 000 more than the US equivalent. Many mining projects that were planned are being postponed, and investors are looking to Peru; even the US copper mining industry is becoming more competitive.	10
Energy supply is also a worry as Chile produces virtually no fossil fuels and relies on imported coal and liquid natural gas to power its mines. Energy costs account for 18% of the cost of copper production.	15
Water supply is also becoming a major problem. Farmers and communities accuse mining companies of causing water shortages to keep their operations running. A prolonged drought has not helped. Mining firms are turning to desalination plants or using untreated seawater. However pumping water 200 kilometres from the Pacific Ocean to the copper mines is costly.	20
Chile's environmentalist movement has forced the government to tighten regulations. In 2001, it took 236 days to get an environmental impact assessment of a new mine approved. By 2013, this had increased to 506 days.	25
(Source: adapted from http://www.ft.com/cms/s/0/ea060ef4-6ae2-11e5-8171-ba1968cf791a.html#axzz3p20lf45k Gideon Long September 27, 2015)	

(a) With reference to Figure 2, explain **one** likely reason for the change in the Chile peso exchange rate between 2013 and 2015.

(5)

(b) Examine the likely impact of externalities of copper mining on firms and communities within Chile.

(8)

(c) Apart from externalities, discuss the problems that Chile faces as a result of dependency on copper mining.

(12)

EITHER

(d) With reference to the information provided and your own knowledge, evaluate the microeconomic and macroeconomic effects of policies that could be used to stimulate economic growth and development in Chile.

(25)

OR

(e) With reference to the information provided and your own knowledge, evaluate the microeconomic and macroeconomic impact on Chile's economy of changes in the level of investment.

(25)

(Total for question = 50 marks)

Q3.

Evaluate the likely consequences of imperfect information in the market for higher education. Use an appropriate externalities diagram in your answer.

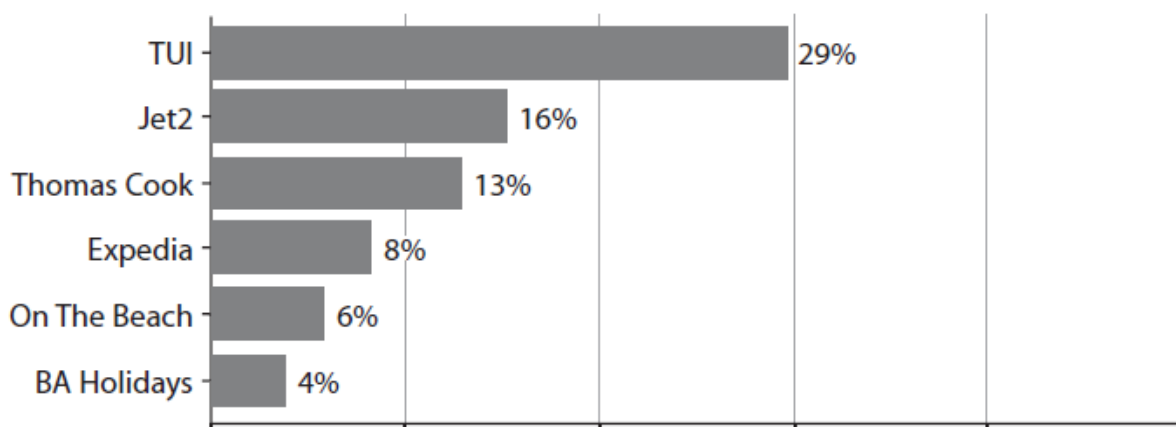
(Total for question = 25 marks)

Q4.

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.

(5)

(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)

Q5.

(a) Define the term 'external benefits'.

(1)

.....

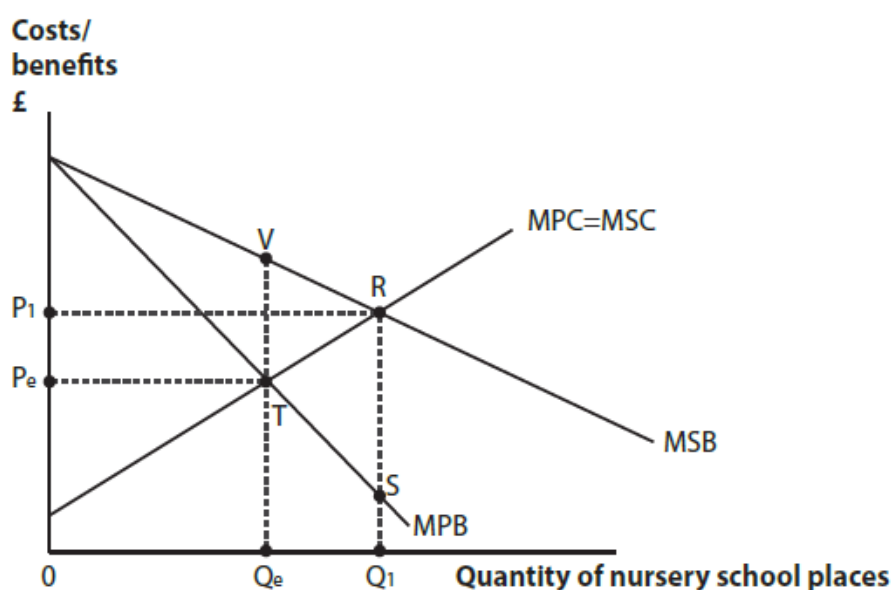
.....

.....

.....

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 0P1 per unit
- ☐ **B** subsidy of RS per unit
- ☐ **C** tax of VT per unit
- ☐ **D** minimum price of 0P1 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)

Q6.

(a) Explain the difference between 'good' deflation (Extract B, line 16) and 'bad' deflation (Extract B, line 27).

(5)

(b) With reference to Figure 1 and Extract A, examine the likely reasons for the fall in oil prices since the middle of 2014.

(8)

(c) With reference to Extract A, discuss the factors necessary for the success of a cartel.

(12)

EITHER

(d) With reference to the information provided and your own knowledge, evaluate the microeconomic and macroeconomic effects of a sustained period of deflation.

(25)

OR

(e) With reference to the information provided and your own knowledge, evaluate the microeconomic and macroeconomic effects of a sustained fall in global oil prices.

(25)

(Total for question = 50 marks)

Q7.

'Tradable permits are less effective than taxation in reducing carbon emissions.'

To what extent do you agree with this statement?

(Total for question = 25 marks)

Q8.

(a) With reference to Figure 1, explain **one** possible cause of the forecast change in total energy use.

(5)

(b) With reference to Figure 4, examine the likely impact on the USA's circular flow of income of the trends in exports and imports of natural gas between 2000 and 2020.

(8)

(c) With reference to the information provided, discuss the likely impact of a change in the price of gas on the markets for solar energy and nuclear energy.

(12)

EITHER

(d) With reference to the information provided and your own knowledge, evaluate the possible microeconomic and macroeconomic effects on the UK economy of a decision by the government to encourage fracking.

(25)

OR

(e) With reference to the information provided and your own knowledge, evaluate the possible microeconomic and macroeconomic effects on the global economy of lower energy prices.

(25)

(Total for question = 50 marks)

Q9.

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 external benefits of higher education include increased tax revenue, faster economic growth, greater innovation and labour market flexibility.

(Source adapted from: <https://www.timeshighereducation.com/news/higher-education-its-good-for-you-and-society/2008681.article#survey-answer>)

(a) Draw an externalities diagram to show the likely impact of the consumption of higher education.

(4)



(b) On average, in the UK, a working-age graduate earns approximately £10 000 more per year than a non-graduate.

This suggests a university degree provides a substantial

(1)

- ☐ **A** external benefit
- ☐ **B** external cost
- ☐ **C** private benefit
- ☐ **D** social cost

(Total for question = 5 marks)

Q10.

Some questions must be answered with a cross in a box (☒). If you change your mind about an answer, put a line through the box (☒) and then mark your new answer with a cross (☒).

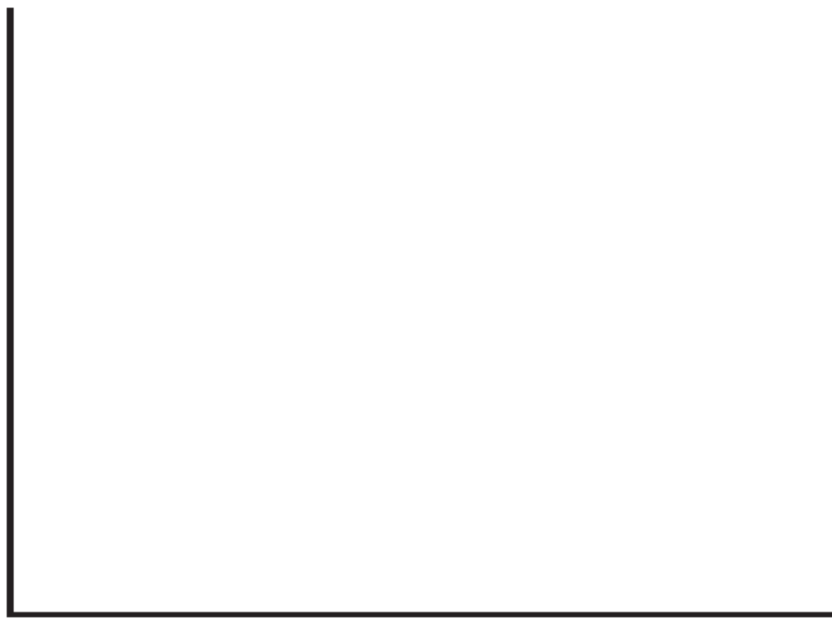
Use the data to support your answers where relevant. You may annotate and include diagrams in your answers.

A company that provides drinking water and treats waste water has been fined £180 000 after an incident that killed about 2 500 fish. The charges relate to an illegal discharge of sewage from the waste water treatment plant that polluted nine kilometres of the River Severn, a popular tourist destination.

(Source: adapted from <https://www.leaderlive.co.uk/news/wrexham/19393552.water-company-fined-today-sewage-leaked-wrexham-river-killing-2-500-fish/>)

(a) Draw an externalities diagram to show the likely impact of the sewage discharge on the local tourist industry.

(4)



(b) Which **one** of the following is the most likely effect of the £180 000 fine?

(1)

To:

- ☐ **A** increase market failure
- ☐ **B** increase profits for the water company
- ☐ **C** reduce external costs
- ☐ **D** reduce government failure

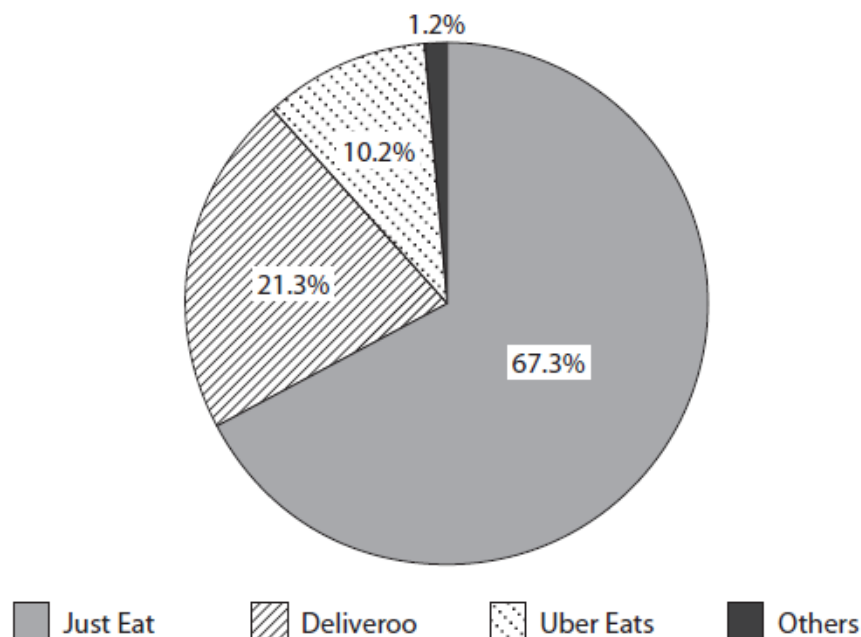
(Total for question = 5 marks)

Q11.

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

The food delivery industry

Figure 1: Market share for third-party food delivery services in the UK, 2019



(Source: adapted from <https://onefourzerogroup.com/the-takeaway-takeover/>)

Extract A

National Minimum Wage rises are more significant for 23 to 25-year-olds

In 2021, the National Minimum Wage main rate, also known as the National Living Wage, rose by 2.2% to £8.91, following a 6.2% rise in 2020. By reducing the age at which people are eligible for the National Living Wage to 23 in 2021, it is estimated that an additional 7.5% of 23 to 25-year-olds could get a 71p an hour pay rise. This amounts to an 8.7% increase, which may cause further financial worries for employers.

5

(Source: adapted from https://www.ndna.org.uk/NDNA/News/Latest_news/2020/Minimum_wages_to_rise_by_inflation_in_April.aspx)

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. 10

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. 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)

Q12.

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 ☐.

HS2 is a high-speed rail network linking the north and south of England. HS2 will be four years late and cost double the Department for Transport's original estimate.

(Source: <https://www.transportxtra.com/publications/local-transport-today/news/58459/hs2-will-be-four-years-late-and-cost-double-the-dft-s-estimate-mps-told>)

(a) Define the term 'government failure'.

(1)

.....

.....

.....

.....

(b) Explain **one** likely microeconomic reason why the government is using taxpayers' money to fund HS2.

(2)

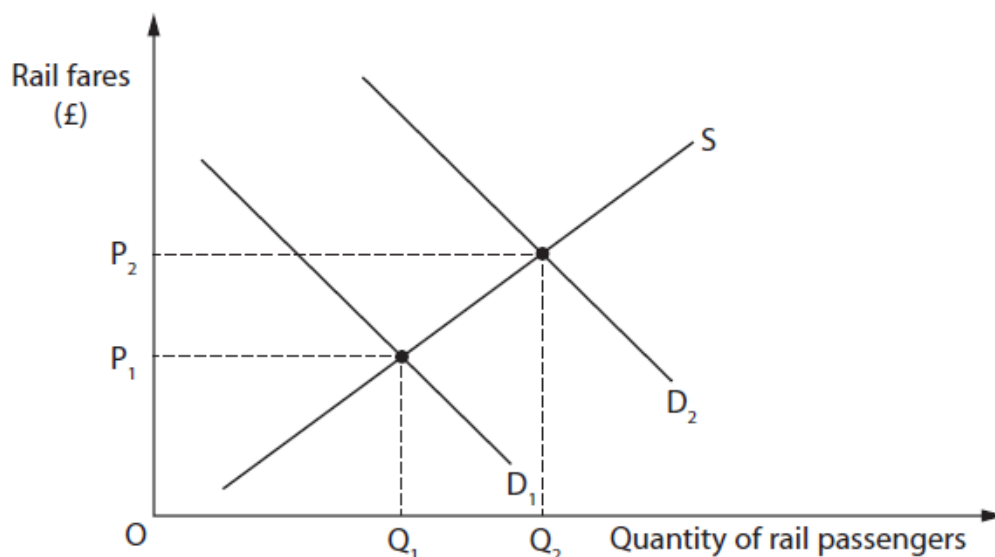
.....

.....

.....

.....

(c) The diagram below shows the demand for and supply of passenger rail services.



The shift of the demand curve from D_1 to D_2 is most likely to result from a:

(1)

- ☐ **A** government decision to impose a tax on workplace parking
- ☐ **B** government decision to increase subsidies for rail travel
- ☐ **C** planned expansion of the government's railway track building programme
- ☐ **D** reduction in the tax imposed on a litre of petrol

(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)	Knowledge 2, Application 2, Analysis 1 Knowledge: 1 mark for identification of a possible reason and 1 mark for its relevance to a fall in the value of the currency. Possible reasons: • Fall in demand for peso (1) with reason (1) • Increase in supply of peso (1) with reason (1) • Current account balance: ◦ Fall in the value of X (1) because export prices have fallen (1) ◦ Rise in the value of M (1) because of economic growth (1) • Decrease in interest rates (1) in Chile relative to other countries (1) • Fall in FDI (1) with reason e.g. reduced foreign investment in Chilean mining (1) • Change in hot money flows (1) with reason e.g. speculative selling of peso (1) • Rise in value of other countries' exchange rates (1) with a change in relative rates (1) • Relatively high inflation in Chile (1) compared to other countries with which it trades (1)	

	Application: 2 marks for data references e.g. • Copper prices have fallen, Fig. 1 (1) e.g. to \$5000 (1) • The Chilean peso has decreased in value (1) • Calculation based on data (award a range of answers because the data is given for the whole year) e.g. 0.2 to $0.14 = 30\%$ fall (or similar) (1 + 1) • Inflation 5% in Chile (1)/above 2-4% target (1)/ e.g. because of higher unit labour costs (implied by high truck drivers' wages, Extract B) (1) • Fall in FDI as mining dries up, therefore reduced demand for peso • Application of an exchange rate diagram e.g. with peso on vertical axis with shift (1) Analysis: • 1 mark for explanation of the process linking to the cause to the identified change e.g. fall in copper prices means that the value of exports fall because demand is price inelastic (1) or imports rise in value because of economic growth sucking in imports (1) diagram showing shifts in demand or supply of pesos linked to correct explanation (1) NB only award 1 mark in total for use of a diagram	(5)
--	--	-----

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

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

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

Question Number	Indicative content	Mark
(c)	Knowledge 2, Application 2, Analysis 4 • Link between falling copper prices and falling incomes and government revenue e.g. dramatic loss of government revenue from peak of \$11.5 billion • Exposure to risk e.g. high proportion of GDP and exports dependent on copper so this could cause risk of falling incomes • Price volatility e.g. might cause reduced FDI/investment • Impact of declining terms of trade might be used • Successful exports of copper might force up the exchange rate, other 'Dutch disease' issues e.g. impact on non-copper sector • Falling demand for copper might cause peso to fall in value, causing declining terms of trade/cost push inflation • May use diagram to illustrate effects of low PES, PED • Award use of concepts or theories such as Prebisch-Singer, with link to terms of trade and changing world incomes. • Firms may close down e.g. Extract A lines 8-9: award a microeconomics diagram showing shutdown point NB Do not award any parts of answers which are related to externalities A KAA point referring to changes in tax revenues can only be awarded Level 3 if a specific link is made to the source of the tax revenue e.g. – corporation tax or profits of a state-owned enterprise For a Level 3 answer there must be reference to dependency rather than just falls in copper prices, and the wider economy rather than just copper mining firms	(8)

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

Question Number	Indicative content	Mark
(c) continued	Evaluation 4 • Advantages of copper dependency for Chile's economy: ◦ Copper dependency is an advantage when copper prices are high e.g. they have been high for a prolonged period, with many advantages ◦ Use of data to support this, e.g. \$11.5 bn a year tax revenue, or percentage changes in prices Figure 1 ◦ Low national debt, falling levels of poverty, inward direct investment • Other industries thriving e.g. salmon industry • Chile's economy 'best run in the region' and has financial strength to overcome copper price changes, relative to other countries who are dependent on primary products e.g. Venezuela • The fall in the exchange rate corrects the problem of over dependency • Copper prices are far less volatile than 2007-2011	(4)

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

Question Number	Indicative content	Mark
(d)	Knowledge 4, Application 4, Analysis 8, Evaluation 9 16 marks for KAA, for effects of policies: Microeconomic effects may include: • fiscal, e.g. 'mildly expansionary policies' such as cutting income tax will increase real wages • monetary e.g. cutting interest rates can reduce the costs of borrowing for individuals and firms. • supply side policies, e.g. privatisation, free trade can make markets more competitive • growth and development strategies e.g. education, debt relief etc. can further alleviate poverty • price controls Macroeconomic effects may include: • Cutting interest rate might cause the peso to further decrease in value, which would cause inflation / increase the value of exports leading to current account improving • Privatisation or other supply side policies can increase international competitiveness NB for a Level 4 response there must be reference to both economic growth (e.g. rising incomes) and economic development (e.g. longer life expectancy through improved living standards) and a focus on effects for Level 3 and above. 9 marks for evaluation – might include: • Expansionary fiscal policies might involve an improvement in the redistribution of income • Objectives might conflict, e.g. cutting interest rates can cause inflation or widen inequality, or increased government spending to produce growth might cause inflation (e.g. Phillips Curve) • Policies might conflict, e.g. increasing length of time to gain a permit to reduce externalities can cause a negative supply side impact e.g. by raising production costs for firms.	(25)

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

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

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

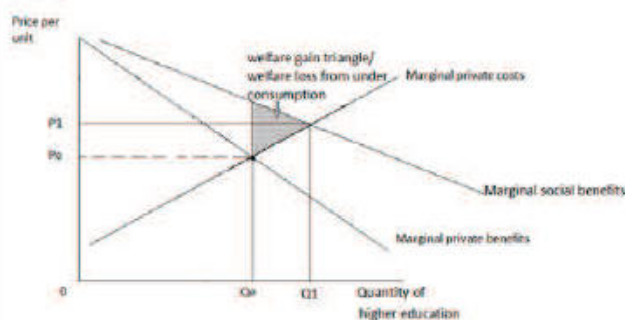
	Up to 9 marks for evaluation points include: • Investment in capital might decrease employment • Investment in human capital e.g. education in Extract A, is hard to measure in terms of effectiveness • Data points to both increases and decreases in investment. Other forms of injection into the circular flow might be more sustainable, e.g. G • Depends if the investment is internal or FDI as to the effects on the balance of payments • Depends on whether there is a demand deficiency (Keynesian viewpoint) or failings in the supply side	(25)
--	---	------

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

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

Q3.

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



(16)

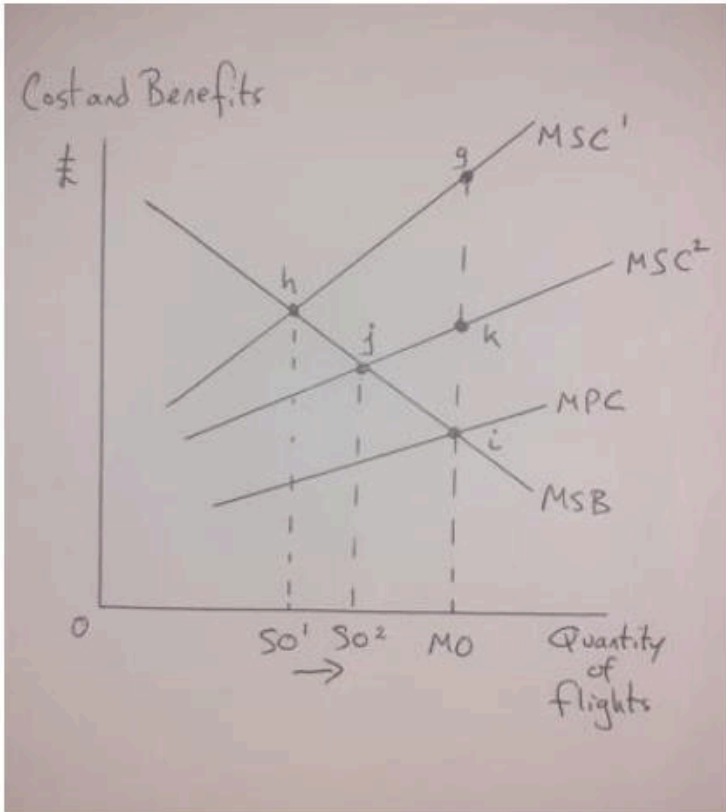
Knowledge, application and analysis		
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–4	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains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

Question Number	Indicative content	Mark
continued	Evaluation 9 Evaluation • information available on internet/ by universities to reduce the problem • Long term- less of an issue as more go to university and friends and family can share information • Can we afford for all to access HE- budget deficit issues • Measurement of costs and benefits hard to quantify to know positions of curves	(9)

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

Q4.

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

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

	Analysis: 1 mark for linked explanation of each identified benefit (1+1) e.g. • Third party effects are lower (1) so external costs are lower/MEC falls (gi to ki) (1) • MSC shifts/skews right (1) showing new social optimum position (MSB=MSC) (1) • Welfare loss falls (1) from ghi to kji (1) Application: 2 marks for reference to Extract B e.g. • Thomas Cook airline emissions are lower/switch fuel types/new engines (1) • In 2018 Thomas Cook Group Airline was included in the top 10 of the world's most fuel-efficient airline (1) • Lower insurance bills/clean up bills for companies/households at risk of flood damage/storms (1) loss of cattle/crops due to drought declines (1) • CO₂ emissions per passenger declines (1) quantity of flights increases (1)	
--	--	--

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

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.

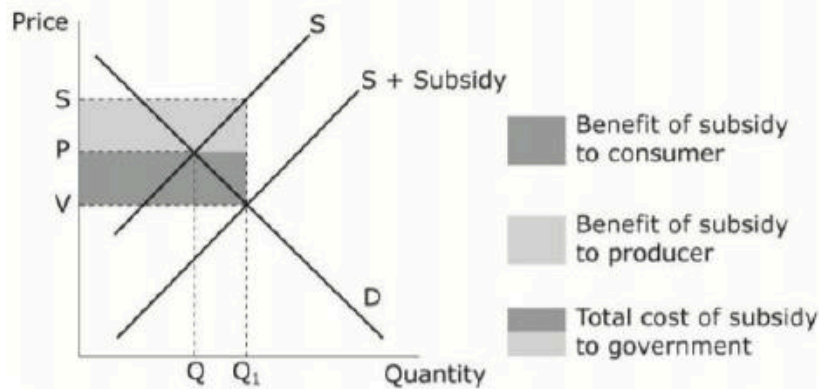
Question Number	Indicative content	Mark
(c) continued	Evaluation 4 Case against ‘principal agent problem’ - Employee share-ownership schemes address the problem. £4m of the CEO's £8.5m earning is in shares – so as an employee he is motivated by profit maximisation, bringing him in-line with shareholders.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

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.	
--	---	--

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

Q5.

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

Question Number	Answer	Mark
	B	(1)

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

Q6.

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

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

Question Number	Indicative content	Mark
(c)	Knowledge 2, Application 2, Analysis 4 • Meaning of a cartel: group producers acting together; restricting supply to force up price • The producers act as a monopolist when a cartel is formed • All major producers must be members of the cartel for it to be able to succeed • No new substitutes for the product must be available (in this case shale oil is an effective substitute for oil) • Supply must be controlled – without ‘cheating’ by individual producers.	(8)

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

Question Number	Indicative content	Mark
(c) continued	Evaluation 4 • Much will depend on relative price of oil in relation to sources of renewable energy • A cartel might be more successful in the short run than in the long run when alternatives may be developed and become more available • Less powerful members of the cartel are likely to cheat • Difficulty of controlling activities of major producers • Impact of increase in shale oil/gas production • Inability to prevent entry of new producers (discussion of the degree of contestability in the market.	(4)

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

Question Number	Indicative content	Mark
(d)	Knowledge 4, Application 4, Analysis 8, Evaluation 9 Microeconomic effects: • on consumers - increase in real value of savings; falling prices so increase in consumers' surplus • on producers - lower input prices leading to falling costs of production and possibly higher profits • on workers - could result in nominal wage cuts • on shareholders - falling profits might result in falling dividends. Macroeconomic effects: • impact on Investment - less incentive for firms to buy capital equipment • impact on Employment - could lead to a 1930s type depression with massive unemployment • impact on Economic growth - could result in prolonged depression • impact on Real value of a country's national debt increases. Possible evaluation points include: • impact depends on the causes of deflation – whether it is 'good' or 'bad' • consumers face increase in real value of mortgages and debts • producers face falling revenues and profits • impact on macroeconomic variables (growth, employment, balance of payments) dependent on type of deflation.	(25)

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

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

Question Number	Indicative content	Mark
(e)	Knowledge 4, Application 4, Analysis 8, Evaluation 9 Microeconomic effects: • impact on costs of production resulting in higher profits for businesses • impact on revenues and profits of oil companies (reference to price inelasticity of demand) • impact on investment decisions by firms in the oil market, especially with reference to shale oil • impact on wages of workers in oil industry • impact on consumer real incomes and on demand for other goods and services • impact on green energy industries (reference to cross elasticity of demand). Macroeconomic effects: • lower global rates of inflation (AD/AS analysis) • impact on global growth rates • impact on balance of payments on current accounts of oil importing countries and oil exporting countries • impact on CO₂ emissions: consideration of impact on climate change on different countries - reference to external costs.	

	Possible evaluation points include: • impact on different industries will depend on their oil costs as a proportion of total costs • impact on households will depend on cost of oil in household budgets • impact on demand for other goods and services will depend on other factors e.g. state of world economy, consumer confidence, household debt • impact on inflation rates and growth rates depends on elasticities of AD and AS curves • impact on balance of payments on current account of different countries depending on whether they are net importers or net exporters of oil • impact on external costs depends on how different price elasticity of demand for oil.	(25)
--	--	------

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

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

Q7.

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

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

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

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)
--	---	------

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

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

Q9.

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

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

Question Number	Answer	Mark
(a)	Knowledge 2, Application 2 1 mark for the correct labelling of MPC, MSB and/or MPB 1 mark for correct shift from MPC to MSC, divergent or parallel 1 mark for showing the external cost at market output Q ($MSC > MPC$) 1 mark for the new social optimum equilibrium (Q_1) identified where MSC equals MSB (Q_1) or overproduction 1 mark for welfare loss/gain identified 1 mark for quantity of waste water treatment Diagram required e.g.	(4)

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

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)
--	--	-----

Question Number	Indicative content	Mark
(c)	Knowledge 2, Application 2, Analysis 4 Points might include: • integration includes horizontal/vertical/ conglomerate joining of firms • leads to economies of scale • increased market share • removal of competition • increased monopoly power • international rivals can avoid taxes • prices higher for consumers • reduced choice for restaurants and consumers • monopsony power over restaurants • technical advantages of vertical integration • vertical power over firms can leave other firms with high barriers to entry • Just Eat has bought out rivals e.g. merger between Just Eat and Takeaway.com • Amazon has partially bought Deliveroo (16% so far) which may have saved it, and/or improved it on the tech side NB effects might include more than one types of economies of scale, or other combined analysis. Award diagrammatic analysis e.g. economies of scale LRAC	(8)

Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no chains of reasoning or links between causes and consequences.
Level 2	3–5	Displays elements of knowledge and understanding of economic principles, concepts and theories. Applies economic ideas and relates them to economic problems in context, although does not focus on the broad elements of the question. A narrow response; chains of reasoning are developed but the answer may lack balance.

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

Question Number	Indicative content	Mark
(c) continued	Evaluation 4 • mergers might be necessary to ensure the survival of firms (e.g. Deliveroo case) • further mergers might be limited by the CMA • supernormal profits might lead to lower prices, better technology and/or a more consumer-led market • prices may fall due to fall in average costs due to e.g. economies of scale • diseconomies of scale	(4)

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

Question Number	Indicative content	Mark
(d)	Knowledge 4, Application 4, Analysis 8, Evaluation 9 Microeconomic effects of depreciation may include: • higher cost of imports of food and therefore higher cost of production for hospitality sector • lower profits for firms in hospitality • higher prices of food for consumers • consumers have lower standards of living if they are on fixed incomes/ • falling real incomes so demand for restaurant meals and food delivery services might shift left • workers have higher incomes if working in exporting firms in other industries, so might use more delivery services • restaurants might begin to use more locally produced food Macroeconomic effects of depreciation may include: • capital in-flows, e.g. benefits to multinational firms such as Just Eat for investment in the US using other currencies/ AD and/or LRAS shift out • cost push inflation/SRAS shifts in • more injections and fewer withdrawals leading to rise in AD and multiplier effect • increased employment • incentive to use transfer pricing • UK tourism might be boosted by depreciation which would improve local restaurants NB for a Level 4 response there must be micro and macro effects and use of data with reference to restaurants or other food delivery services. Higher costs, changes in competitiveness, environmental changes could be seen as micro or macro, for example, can be used as either micro or macroeconomics. NB Effects in KAA could be used as evaluation and vice-versa.	(25)

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

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

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

Question Number	Indicative content	Mark
(e)	Knowledge 4, Application 4, Analysis 8, Evaluation 9 16 marks for KAA, for effects of increased minimum wage Microeconomic effects may include: • rise in wages will benefit very low paid workers. Might be shown on increasing NMW diagram • effect on cost to firms e.g. reduced profit margins. Might be shown on a cost and revenue diagram. • excess supply of hospitality workers • effect on prices consumer surplus falls, output falls, price increases • impact on quantity of labour demanded/contraction of labour demand • impact on productivity • inefficient resource allocation due to distortion of price mechanism Macroeconomic effects may include: • income equality improvements – may use Gini/Lorenz • prices rise – inflationary effects • reduction in relative poverty • AD: increase in consumption as incomes increase/fall in investment as profits fall • SRAS: cost-push • LRAS: if investment falls, then LRAS shifts in • reduced employment • higher income tax revenue • lower unemployment related benefits NB for a Level 4 response there must be micro and macro effect (s) and use of data with reference to restaurants or other food delivery services. Employment or welfare issues could be seen as micro or macro, for example, can be used as either micro or macroeconomics. NB Effects in KAA could be used as evaluation and vice-versa.	(25)

	9 marks for evaluation – points might include: • effect on firms depends on how much wage costs are as a proportion of overall costs • impact on real output depends on level of spare capacity/elasticity of LRAS/magnitude of multiplier • effect on workforce of employment regulation depends on elasticity for demand for labour, and degree with which it can be replaced with capital • depends on PED of food delivery firm market as a whole • consumers might also have increases in wages so profits might not fall • some firms will face decreased demand and go out of business. Loss of jobs and other economic activity • depends on the PED and PES in factor market and product market as a whole • LRAS might rise as economically inactive workers enter labour force to look for jobs • higher tax revenue may not occur if unemployment increases or investment decreases • higher unemployment related benefits if unemployment increase • productivity/motivation arguments	
--	--	--

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

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

Q12.

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

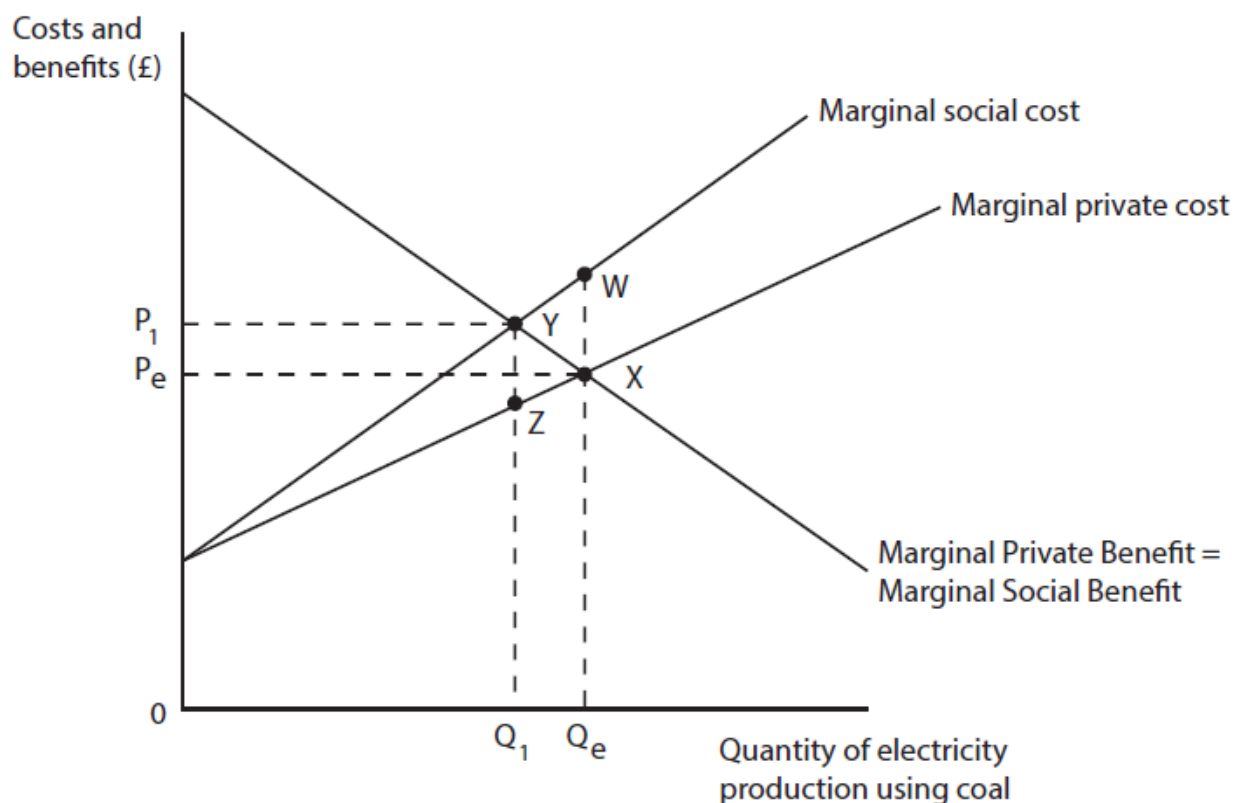
Question Number	Answer	Mark
(b)	Knowledge 2 Knowledge 1 mark for reason and 1 for linked development Possible answers include: • Positive externalities (1) resulting from people using railways rather than roads (1) • Risk/imperfect information (1) if the project is undertaken by the private sector it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

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

Questions

Q1.

The diagram shows the market for the production of electricity using coal. Assume there are no external benefits.



(a) Which one of the following can be inferred from the diagram?

(1)

- A** At the free market equilibrium quantity, the marginal social costs exceed the marginal social benefits
- B** The area of net welfare loss at the free market equilibrium is given by the area XYZ
- C** The social optimum quantity exceeds the free market equilibrium quantity
- D** An increase in the quantity from Q_1 to Q_e will reduce the net welfare loss

Answer

(b) Explain how the introduction of a tradable pollution permit scheme is likely to reduce the production of electricity using coal.

(4)

.....

.....

.....

.....

.....

.....

.....

.....

(Total for question = 5 marks)

Q2.

In September 2016 the government approved the building of an £18 billion nuclear power station, Hinkley Point C, which will supply 7% of UK electricity for up to 60 years. The power station is funded by Chinese and French investment.

Evaluate the likely private costs and external costs involved in such major power station construction projects. Use an appropriate externalities diagram in your answer.

(Total for question = 25 marks)

Q3.

Some questions must be answered with a cross in a box (☒). If you change your mind about an answer, put a line through the box (☒) and then mark your new answer with a cross (☒).

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

A large number of people should be vaccinated against a new virus, so that even those who are not vaccinated will benefit.

(a) With reference to the statement above, explain the difference between positive and normative statements.

(3)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(b) Which **one** of the following explains how market failure might occur in a free market economy?

(1)

- ☐ **A** A net welfare loss results from intervention by the government
- ☐ **B** Firms enter the market in response to higher prices
- ☐ **C** Goods with positive externalities are underprovided
- ☐ **D** Prices rise when there is excess demand

(Total for question = 4 marks)

Q4.

Universities UK raised concerns about the proposal to reduce the maximum tuition fees (fee cap) for undergraduate courses in England from £9 000 to £6 000. It stated "This unfunded proposal to reduce the fee cap would damage the quality of experience our universities could deliver to students and remove opportunities for those seeking to benefit from a university education".

(Source: adapted from tuition fees 2015 Times letter Universities UK
<http://www.universitiesuk.ac.uk/highereducation/Pages/UUKboardFeesLetter.aspx#.VjoQRbfhDIU>)

(a) Explain why reducing the tuition fee cap may result in excess demand for university places.

(3)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(b) Which **one** of the following statements is correct?

(1)

- ☐ **A** The marginal social benefits exceed the marginal private benefits from university education
- ☐ **B** University education is an inferior good
- ☐ **C** University education is a public good
- ☐ **D** The social optimum equilibrium quantity is less than the market equilibrium quantity for university education

(Total for question = 4 marks)

Q5.

The British Broadcasting Corporation (BBC) is a TV broadcaster. It is financed through an annual TV licence fee of £145.50. At this fee level many TV owners benefit from consumer surplus.

(a) Define the term 'consumer surplus'.

(1)

.....

.....

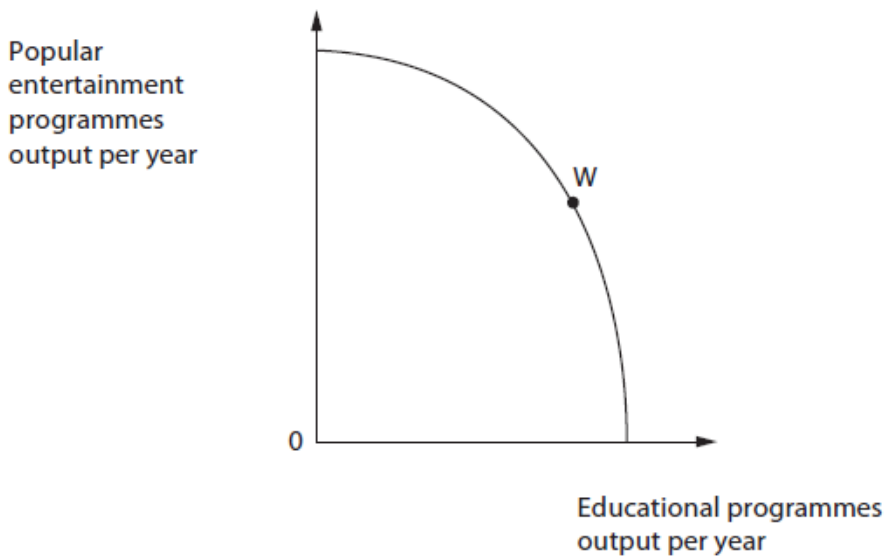
.....

.....

.....

(b) The diagram shows the production possibility frontier for the BBC. Assuming the BBC is at point W, annotate the diagram to show the opportunity cost of providing more educational programmes.

(2)



(c) BBC programmes are often referred to as being public goods. This is because:

(1)

- ☐ **A** all BBC programmes are financed by the public sector
- ☐ **B** the BBC is the most popular broadcaster in the UK
- ☐ **C** the consumption of these programmes is non-rivalrous
- ☐ **D** there are external benefits from the consumption of many BBC programmes

(Total for question = 4 marks)

Q6.

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

The International Energy Agency has predicted that oil use by cars will peak in 2025 because of the increasing number of drivers switching to electric vehicles.

(Source adapted from: <https://www.thetimes.co.uk>)

Evaluate the likely microeconomic consequences of consumers shifting from vehicles powered by fuel obtained from oil to electric-powered vehicles.

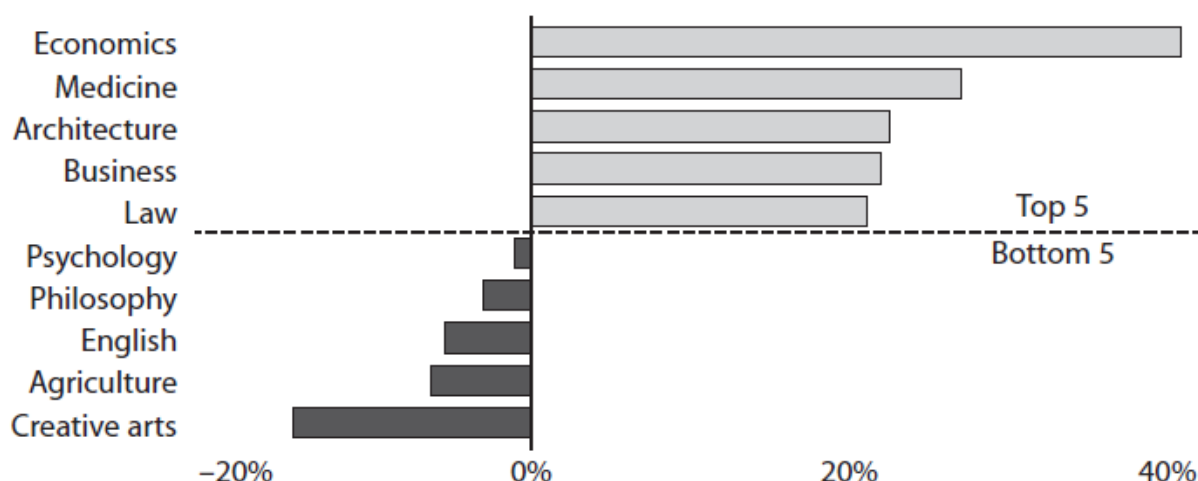
(Total for question = 25 marks)

Q7.

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

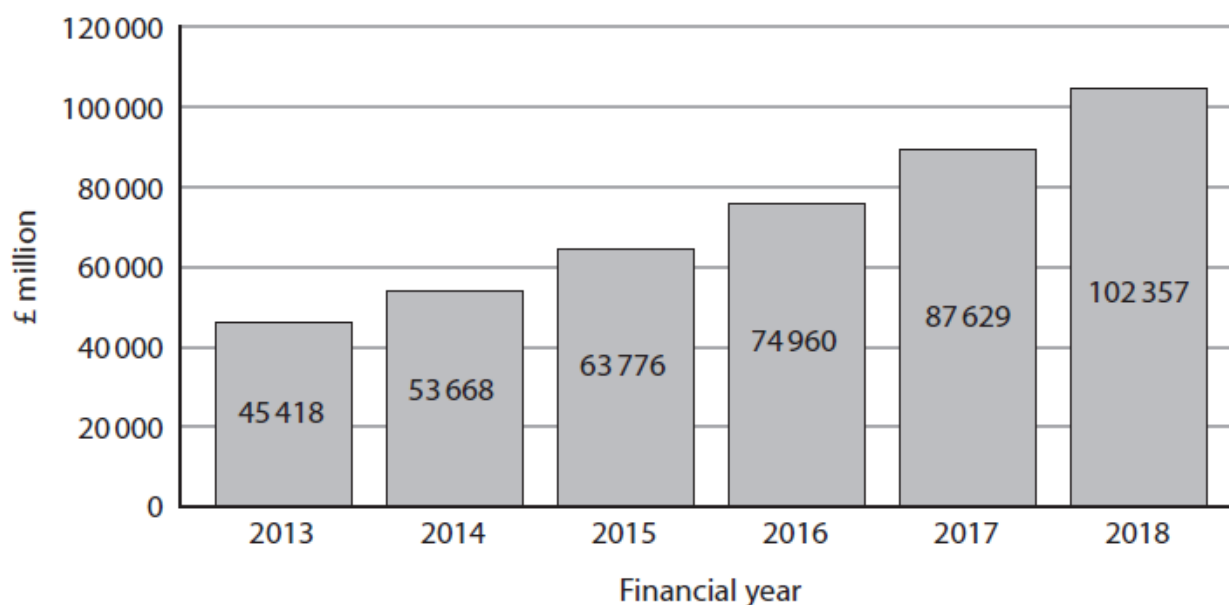
The market for higher education in the UK

Figure 1: Average graduate earnings, according to subject studied, compared to average non-graduate earnings (per cent) 2018 selected subjects.



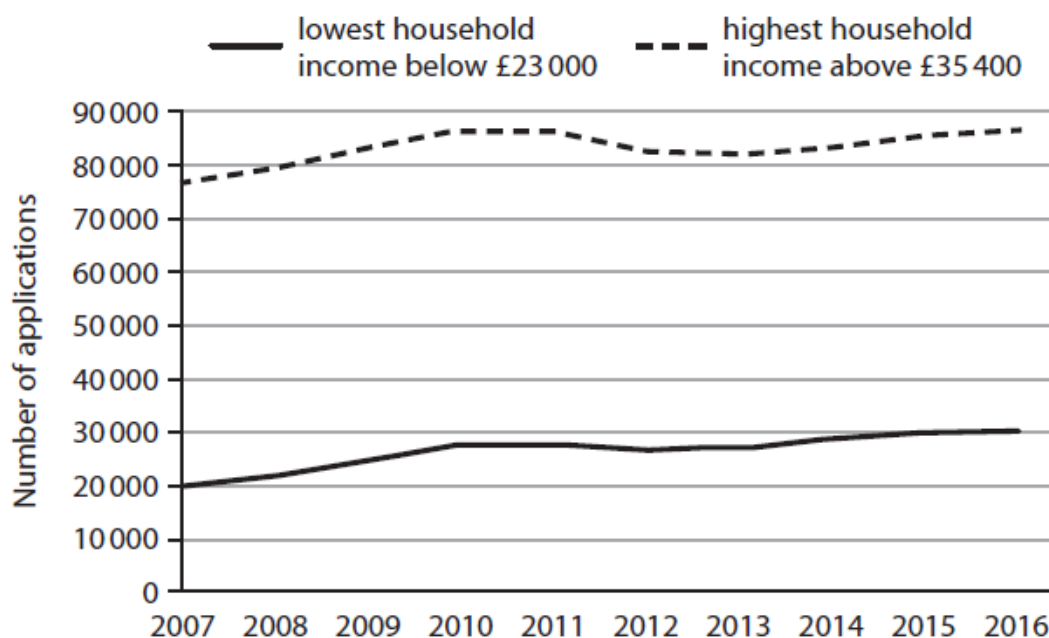
(Source: adapted from <https://www.ifs.org.uk/publications/13731>
The impact of undergraduate degrees on early-career earnings, Research report, November 2018)

Figure 2: Student loans outstanding at the end of financial years 2013 to 2018 in England



(Source: adapted from <https://www.slc.co.uk/official-statistics/student-loans-debt-and-repayment/england.aspx>)

Figure 3: Number of applications to UCAS according to median income of area



(Source: adapted from <https://www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/2018-cycle-applicant-figures-january-deadline>)

Extract A

Rethinking tuition fees

The value of a degree is significant. The latest data shows that the median university graduate income was £10 000 more than the average non-graduate income in 2018. This 'graduate premium' means graduates will contribute significantly to the economy. In addition, the government will benefit greatly from additional tax revenues.

5

However, funding higher education continues to be a major issue. English universities charge some of the world's highest fees. Interest rates on student loans are now 6.3%. There are a large number of courses where graduates are likely to earn less than non-graduates, despite an average of £50 000 of debt.

The Department for Education estimates that 45% of the value of loans will not be repaid. Outstanding student loans in England totalled more than £100 billion in 2018. By 2023 total outstanding student loans are forecast to rise to £120 billion.

10

One option for revising student fees could be to charge higher fees for courses that are more expensive to teach or that have a better chance of higher earnings. That would make Science or Mathematics degrees more expensive to study than English or Philosophy.

15

At most universities the level of fees is likely to be the same flat rate of £9 250 per year. However, science-based courses need more expensive equipment and courses such as medicine require more teaching time and personal instruction.

Tuition fees were introduced in 1998 at £1 000 per year. They are currently £9 250. Economists estimate that the price elasticity of demand for higher education is about -0.5.

20

Charging £9 250 a year for an undergraduate degree makes England very expensive by international standards. Scotland has no fees for Scottish students, and fees in Wales and Northern Ireland are significantly lower. Much of Europe has low or no fees and Germany, which used to charge fees, has abolished them, replacing them with a graduate tax.

25

The only country with comparable fees is the United States. Top private colleges can charge more than the equivalent of £30 000 per year while state colleges can charge local students less than fees in England.

Despite this, student numbers at English universities have continued to increase from 450 000 in 1998 to over 700 000 in 2018. Students from all backgrounds are more likely to go to university than ever before. 30

However, applicants from low-income areas are much less likely to go to university than applicants from high-income areas. The Universities and Colleges Admissions Service (UCAS) found that in the most deprived 10% of postal areas about 20% of young people went to university in 2018, compared with 50% in the highest income areas. Research by University College London revealed that even when candidates from low-income areas had the same exam results, they were much less likely to apply to university than candidates from high-income areas. 35

(Source: adapted from <https://www.theguardian.com/education/2018/dec/16/change-in-student-loan-accounting-could-add-10bn-to-national-debt>)

Extract B

Low-income university students twice as likely to drop out than high-income ones

The number of students from low-income areas who drop out of university before finishing their degree is at its highest in five years, indicating a considerable waste of scarce educational resources. This news comes at the same time as a drive to recruit students from poorer backgrounds, with universities spending a total of £725 million on access initiatives in the past academic year alone. 5

A number of top universities have started to lower their A level grade offers to students from low-income areas, in an attempt to encourage them to apply. However, there is a danger with 'enticing' disadvantaged students through lower grade offers, if universities are not going to provide ongoing support for them once they begin their courses. 10

The latest figures show that 9% of disadvantaged undergraduates do not continue in higher education beyond their first year. In comparison, the average drop-out rate among students from the high-income backgrounds was less than 5%. The gap continues to widen.

A report, published by the Office for Fair Access, concluded that: 'The significance of this for students is huge. Higher education can be a transformational experience that opens doors to rewarding careers and social mobility, but this is only the case if students achieve successful outcomes.' 15

(Source: adapted from <https://www.telegraph.co.uk/news/2017/06/28/number-poor-students-dropping-university-highest-level-five/>)

(a) Explain why 'the price elasticity of demand for higher education is about -0.5' may be of relevance to English universities.

Refer to Extract A in your answer.

(5)

According to Extract B, the drop-out rate of students from low-income households is much higher than that of high-income households.

(b) Assess the likely impact of these drop-out rates on the allocation of resources within an economy.

(10)

(c) With reference to Extract A, explain **one** likely private benefit to students and **one** likely external benefit of higher education.

(6)

(d) With reference to Figure 2, calculate the percentage increase in outstanding student loans from 2013 to 2018.

You are advised to show your working.

(4)

(e) With reference to Figure 1 and Extract A, discuss the benefits of allowing universities to charge higher tuition fees for some degree courses.

(15)

EITHER

(f) Evaluate the possible advantages of a free market approach to providing services such as education.

(20)

OR

(g) Evaluate whether government intervention is able to correct market failure in education.

(20)

(Total for question = 60 marks)

Q8.

Read Extracts A and B and Figure 1 before answering the question.

The market for fish

Extract A

Total allowable catches of North Sea cod halved in response to falling stocks

In 2020, new lower limits on the quantity of cod that can be caught by the UK fishing fleet came into force. These limits on the fish catch, called total allowable catches (TACs), were agreed at the annual EU fisheries negotiations.

It was the last December EU meeting attended by the UK before it left the EU. It was agreed that cod catch limits will be cut by 50% in the North Sea, while reduced limits were agreed for cod in the Celtic Sea, Irish Sea and west of Scotland.

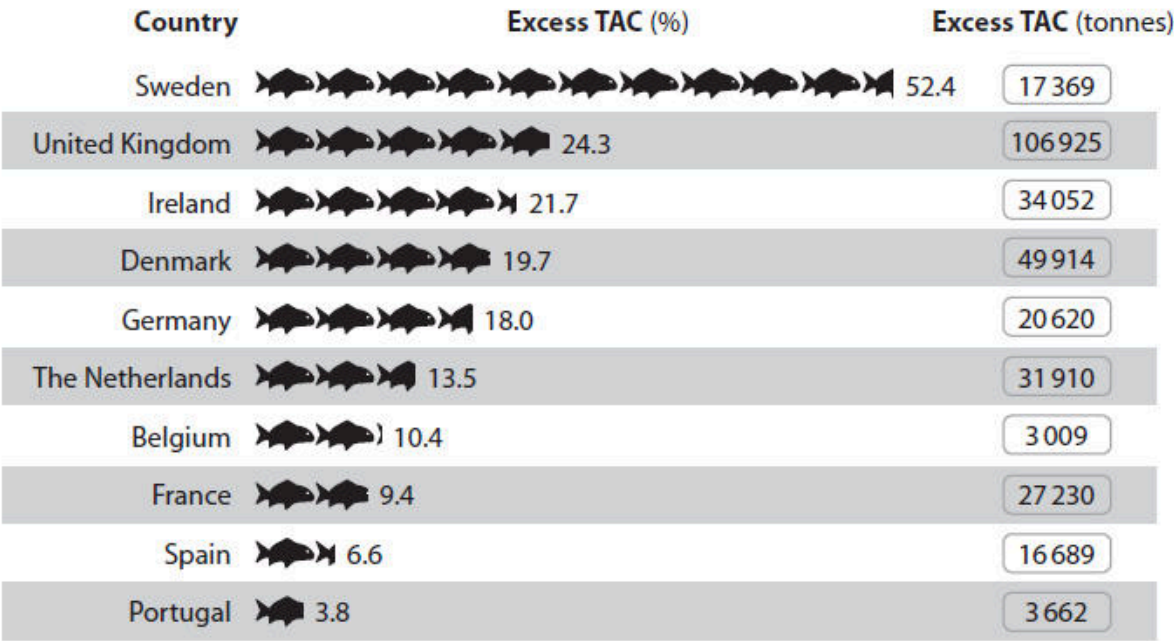
However, there were increases for other types of fish, with TACs for haddock in the North Sea rising by 23% and for sole rising by 19%.

UK Fisheries Minister George Eustice said: "This year there has been mounting scientific evidence suggesting that cod is being overfished in many parts of the northeast Atlantic and we have responded to conserve stocks".

These new regulations applied to the UK while it remained part of the Common Fisheries Policy. In the future it will become an independent coastal state and negotiate on fisheries with the EU and other coastal states such as Norway.

(Source adapted from: <https://www.independent.co.uk/news/business/news/north-sea-cod-stocks-quota-climate-change-brexit-a9252196.html>)

Figure 1
Atlantic over-fishing: share of total allowable catch (TAC) in excess of scientific advice (2019)



(Source adapted from: Statista 2018)

Extract B

The tragedy of the commons

The 'tragedy of the commons' may occur when there are common access resources (CARs). These are natural resources over which no private ownership has been established. Therefore, there are difficulties in excluding people from using or exploiting them. CARs include fisheries and common grazing lands. Oceans are so vast that it is impractical for one fishing company to establish ownership and control. This means that others cannot be prevented from exploiting the ocean. Economists have suggested that with the lack of ownership of these resources, private producers will act in their own self-interest and exploit CARs to maximise profit. This exploitation is unsustainable. In other words, CARs provide an opportunity for individuals to create profit, while creating negative externalities which impact on everybody else. This process is referred to as the 'tragedy of the commons'. 5 10

The 'tragedy of the commons' is at the core of a range of problems that are relevant and threatening to natural resources, environments and human health. In the case of overfishing, fishing companies are not made accountable for the state of the ocean. They continue to fish as much as possible to maximise profit. Today, 90% of fish stocks are depleted. 15

The reason for such a wide range of problems is because there is an environmental cost for everything. The 'tragedy of the commons' is the outcome of the fact that every resource is limited on this planet, coupled with the rising level of demand for these resources. These issues are large-scale and require laws, regulation and international cooperation. 20

(Source adapted from: <http://felixonline.co.uk/articles/2019-12-09-tragedy-commons-drama-planet-not-enjoying/>)

(a) Explain the likely impact of the new 2020 TACs on the price of cod. Include a supply and demand diagram in your answer.

(5)

According to Extract B, lines 15–16, 'fishing companies are not made accountable for the state of the ocean. They continue to fish as much as possible to maximise profit'.

(b) Assess whether it is rational for fishing companies to behave in this way.

(10)

(c) With reference to the information provided and your own knowledge, explain **two** characteristics of private ownership in a free market economy.

(6)

Fish and chips are complementary goods with an estimated cross elasticity of demand of -8. Currently 950 000 bags of chips are sold in UK fish and chip shops each day.

(d) With reference to the information provided, calculate the new quantity demanded of bags of chips from fish and chip shops, following a 2% increase in the price of fish. You are advised to show your working.

(4)

The UK fishing industry employs about 24 000 people, more than half of them working in Scotland.

(e) Discuss the likely impacts on an economy of specialising in the fishing industry. Use a

production possibility frontier diagram in your answer.

(15)

EITHER

(f) Some economists suggest that the market price of cod does not result in the socially optimum level of output. Evaluate the likely external costs from the over-fishing of cod. Use an appropriate diagram in your answer.

(20)

OR

(g) Other than using a TAC, evaluate the policy options which could be used to reduce market failure resulting from over-fishing. Use at least one appropriate diagram in your answer.

(20)

(Total for question = 60 marks)

Q9.

Health provision

Figure 1: National Health Service (NHS) in England: Government spending and projected funding gap, £ billions, 2015 to 2020

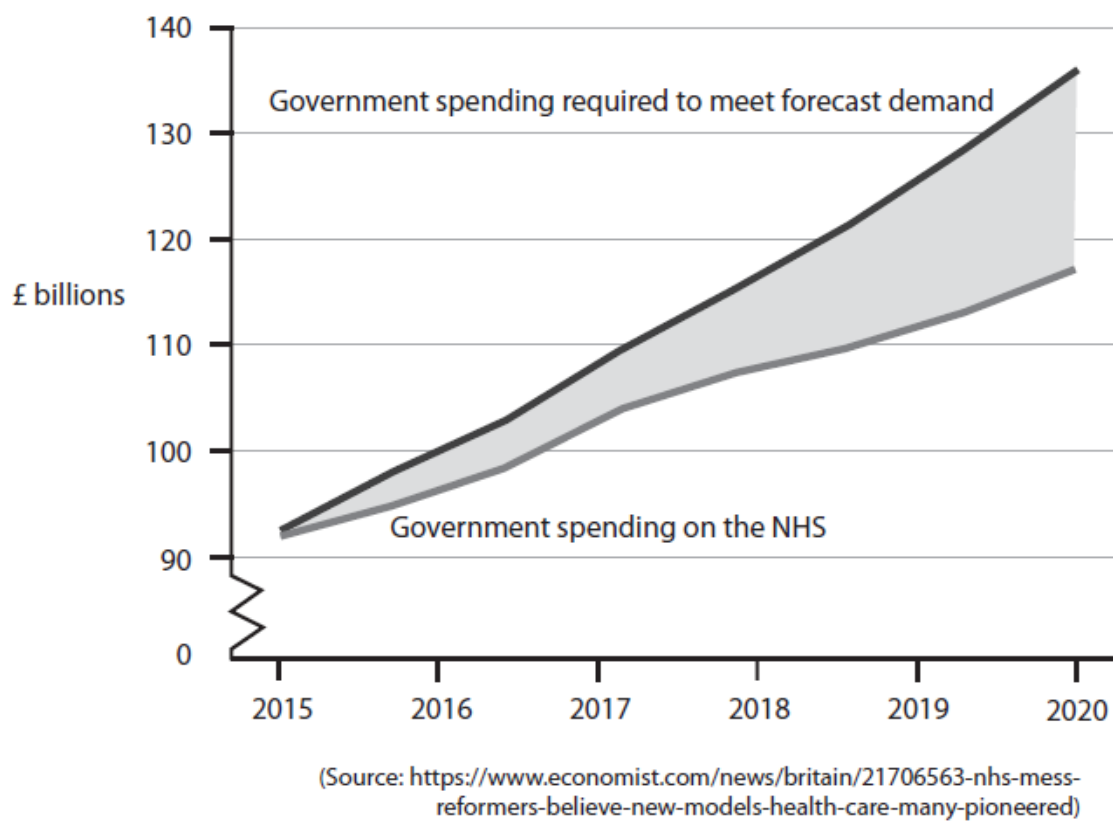
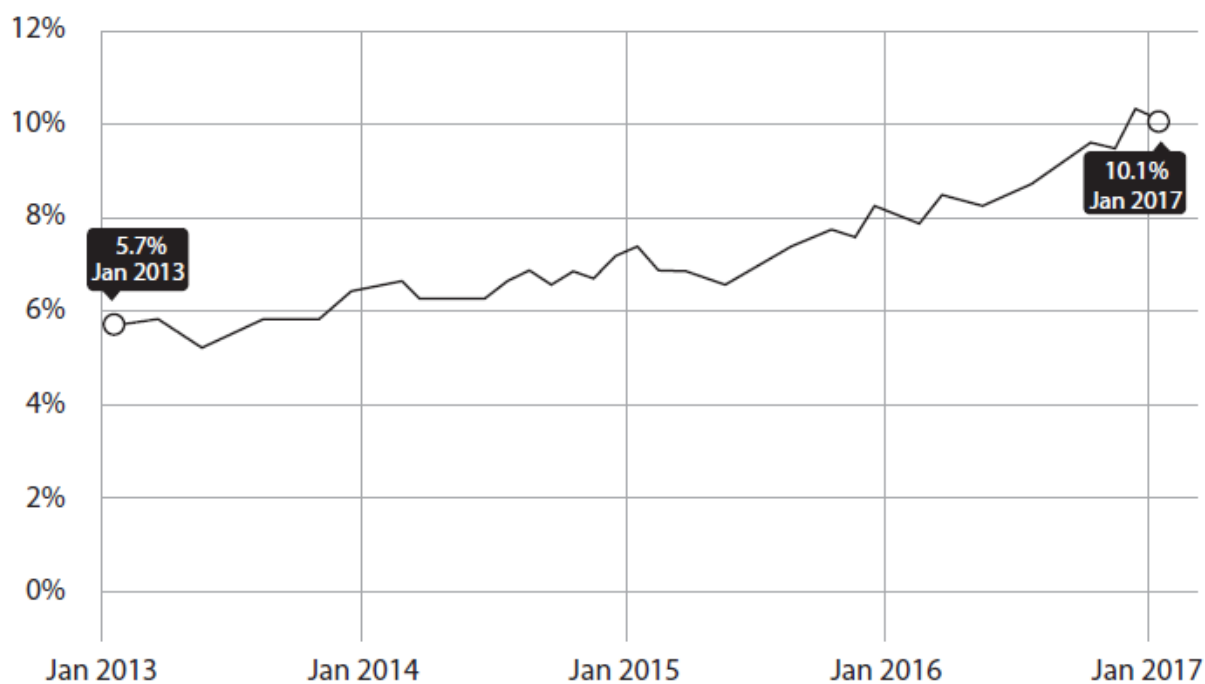


Figure 2: Percentage of NHS patients in England waiting over 18 weeks for non-emergency treatment



(Source: <https://www.statista.com/chart/8813/more-and-more-people-made-to-wait-by-the-nhs/>)

Extract A

Hospitals already full

National Health Service (NHS) managers' warned that bed occupancy rates are approaching 99% in some parts of the country, compared with recommended levels of 85%. In 2017 the number of patients waiting for non-urgent treatment passed the four million mark, the highest figure for almost a decade. 5

The chief executive of the NHS suggested that waiting list targets for routine operations such as hip and knee replacements would have to be sacrificed in order to protect other services, including accident and emergency (A&E) and cancer care.

However, the government has insisted waiting time targets must still be met. Recently the Chancellor awarded the NHS £2.8 billion over three years, including £1.6 billion in 2018 - less than the £4 billion which NHS officials had asked for to keep up with an ageing population and new medical technologies. 10

NHS managers said there was now very little spare capacity in the system, warning of shortages of paramedics, doctors, A&E consultants and nurses.

(Source: adapted from <http://www.telegraph.co.uk/news/2017/12/07/hospitals-already-full-bursting-pressures-mount-warn-nhs-chiefs/>)

Extract B

How health care is funded

Most countries have a mixed economy of health provision typically funded from taxation, patient fees and private health insurance.

The NHS was launched in the UK in 1948 to ensure direct state provision by the government of health care 'free at the point of use'. The NHS is mainly funded from general taxation. However, some NHS patients pay for some of their medical care, such as prescriptions to buy medicine. 5

In the ongoing debate about how best to fund the NHS, some people have proposed introducing a £12 charge for visiting a General Practitioner (GP) doctor. Proponents argue that such a charge would deter overuse of GP services by those who do not have genuine health needs. It would also raise additional money for the NHS and create incentives which will stimulate innovation and more choice. 10

Estimates suggested that a £12 charge on the 450 million visits a year to GPs could have raised enough to cover hospitals' overspend in 2016. Based on exemptions for prescriptions, 90% of patients will not be charged including the elderly, children and low income groups. There would also be administrative costs of collecting the charge and verifying exemptions. These arrangements would significantly reduce the amount a charge would generate, assuming no one paying would be dissuaded from visiting their GP. 15

The proportion of people in the UK taking out private health insurance (PHI) to pay for private health care has increased to 10.6%, despite significant increases in the prices of treatment in private hospitals. Some economists argue that the government should provide subsidies to encourage people to take out private health insurance. This would reduce the burden on the NHS by taking some people out of the state system. Furthermore it is argued that private health care increases choice for users, encourages competition and drives up standards of care. 20

A typical PHI policy for a healthy 35-year-old costs about £650 a year but this rises steeply to £2 300 for those aged 70, when claims are far more likely. The level of contribution is based on their risk of requiring health care. PHI also tends to incur high management and administrative costs due to the resources required to assess risk and claims. Also there is the possibility of market failure given asymmetric information. 25

(Source: adapted from <https://www.kingsfund.org.uk/publications/how-health-care-is-funded>)

Extract C

Public parks are a public good

Public parks are places which people can use for free to exercise or to relax. Parkrun Limited organises free weekly runs in local parks attracting hundreds of joggers per park to enjoy healthy exercise. The government is proposing to ban local authorities charging Parkrun for the use of public parks to fund the maintenance of public parks. The government considers that it is appropriate for the public to pay a reasonable sum for the private use of a facility such as a tennis court or a football pitch which may be used exclusively. However, the government does not consider it appropriate for a local authority to charge a volunteer community group 'seeking to provide a free weekly event' for the use of a public park. Parkrun share the park with other park users. Although a running course may be marked out there is no restriction on other people using the park.

(Source: adapted from © Crown Copyright Running Free – Government consultation on preserving the free use of public parks, April 2017, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/608372/Parkrun_ConDoc.pdf and <http://www.telegraph.co.uk/news/2017/04/14/councils-banned-charging-runners-take-part-regular-saturday/>)

- (a) With reference to Extract A and Figure 2, explain how the health care market in the UK illustrates the economic problem. (5)
- (b) Explain how 'asymmetric information' (Extract B, line 30) can lead to market failure in health provision. (6)
- (c) 'Public parks are a public good' (Extract C, line 1). Assess this statement. (10)
- (d) Calculate the annual revenue raised by charging £12 per GP visit. Assume there will be 450 million GP visits per year and 90% of these will not be charged. You are advised to show your working. (4)
- (e) Discuss likely reasons why the prices of treatments in private sector hospitals are increasing. Draw a supply and demand diagram to support your answer. (15)

EITHER

- (f) Evaluate possible ways the government could intervene to reduce the excess demand for state-funded health care. (20)

OR

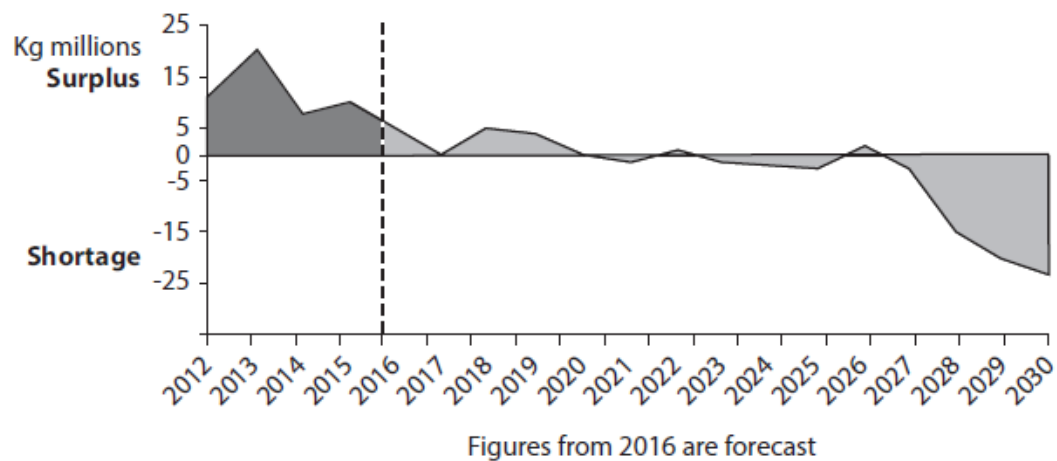
- (g) Evaluate the possible disadvantages of a free market approach to providing health care. (20)

(Total for question = 60 marks)

Q10.

Energy markets

Figure 1: Annual surplus or shortage of uranium, measured in millions of kilograms



(Source: adapted from <http://www.telegraph.co.uk/business/2016/11/20/uranium-the-unloved-metal-whose-price-is-poised-to-go-radioactiv/>)

Extract A

Uranium: the unloved metal

Uranium is a fuel source for nuclear energy production. The price of uranium has fallen to a 13-year low. Uranium is a relatively common metal but locating it in the right concentrations can be difficult. Australia has the biggest known resource of uranium, followed by Kazakhstan. Kazakhstan's production has increased significantly since 2007, accounting for a large proportion of the surplus of this metal. Given the large stockpiles of uranium some firms have ceased production.	5
The biggest impact on the uranium market has been the devastating accident at the nuclear power station in Fukushima, Japan, in 2011. The accident caused a leak of radiation. The accident reduced confidence in the entire nuclear industry, as high doses of radiation leaks increase the risk of cancer. In addition the high cost of safely storing radioactive waste has delayed the building of new nuclear power stations. Japan initially closed all of its 50 nuclear power stations which reduced the demand for uranium. But it has since concluded that nuclear power must be part of its mix of energy suppliers.	10
Despite this setback in 2016 work started on a new uranium mine in Spain to meet the expected rise in demand for the metal. Uranium is a controlled material, so mining companies have to comply with many regulations before opening a new mine. When it opens in 2018, this will be the only uranium mine in Europe, producing 2.2 million kilos a year. It has been in development for more than a decade.	15
Most developed countries, with the notable exception of Germany, have concluded that nuclear power is an essential part of their energy supply. The US and UK are committed to building new nuclear power stations, the latter providing a £30 billion subsidy to build a new nuclear plant at Hinkley Point. China is also building a further 60 nuclear power stations.	20
Supporters of nuclear power say it provides a reliable source of energy at a time when the world's population is increasing, unlike solar power and wind power which both vary with the weather. In addition they argue that no country can significantly reduce carbon emissions, which are causing climate change, without nuclear. France and the UK have committed themselves to shut down all coal-fired power stations by 2025. So demand for uranium over the next two decades seems guaranteed.	25
	30
(Source: adapted from Uranium: the unloved metal whose price is poised to go radioactive, Jon Yeomans, The Telegraph, 20 November 2016 http://www.telegraph.co.uk/business/2016/11/20/uranium-the-unloved-metal-whose-price-is-poised-to-go-radioactive/)	

Extract B

Irrational consumers pay the price

The UK Government has announced that it might introduce maximum price controls on energy used by households.	
The UK's largest energy suppliers are braced for what could be the industry's most significant government intervention following a decade of rising energy bills and low numbers of consumers switching between energy providers.	5
The Prime Minister promised to intervene because the energy market is "manifestly not working" for consumers. Energy prices have risen by 158% in the last 15 years, and four million households, especially those on low incomes, are still on the most expensive energy rates.	10
Some energy analysts have warned the Government against taking a highly interventionist approach that could undermine the energy market and leave customers paying higher prices in the future.	
(Source: adapted from http://www.telegraph.co.uk/business/2017/03/22/governments-pledge-cut-energy-prices-risks-leaving-consumers/)	

Extract C

The economics of climate change

Rising carbon dioxide emissions result from the increase in the use of coal, gas and oil in transport and for energy production. In addition, deforestation, food production and processing methods make the problem worse. These carbon emissions are causing a rise in global average temperatures, known as climate change. Climate change could cause hundreds of millions of people to suffer hunger, water shortages and coastal flooding. 5

Three elements of policy are required for an effective global response to reduce carbon emissions. The first is the pricing of carbon, implemented through tax, trading pollution permits or regulation. The second policy is to support innovation and the deployment of low-carbon technologies. And the third is action to remove barriers to energy efficiency, and to inform, educate and persuade individuals about what they can do to respond to climate change. 10

(Source: adapted from www.sternreview.org.uk/)

(a) With reference to Figure 1 and Extract A, explain why the price of uranium has 'fallen to a 13-year low' (Extract A, lines 2 and 3) in 2016. Include a supply and demand diagram in your answer.

(5)

(b) With reference to Extract A and your own knowledge, assess whether the supply of uranium is likely to be price elastic or price inelastic.

(10)

(c) With reference to Extract B, explain **two** likely reasons why many consumers of energy have not switched to suppliers offering lower prices.

(6)

(d) Using examples from the information provided, explain what is meant by renewable and non-renewable energy.

(4)

The UK Government is considering introducing a maximum price for energy.

(e) Discuss the likely microeconomic effects of this decision on energy producers **and** consumers. Include a supply and demand diagram in your answer.

(15)

EITHER

(f) Using the concept of external costs, evaluate whether nuclear power is under-provided or over-provided in the energy market. Use an appropriate diagram in your answer.

(20)

OR

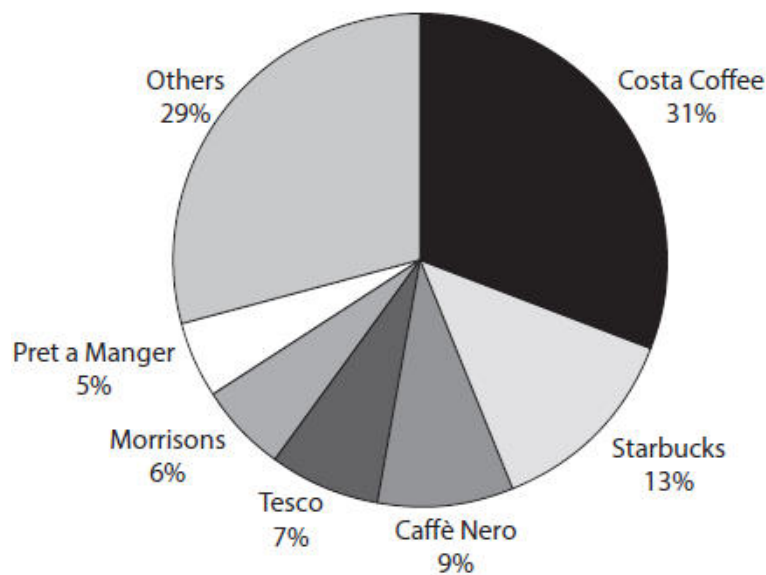
(g) Evaluate ways in which government intervention could be used to reduce carbon emissions. Use at least one appropriate diagram in your answer.

(20)

Q11.

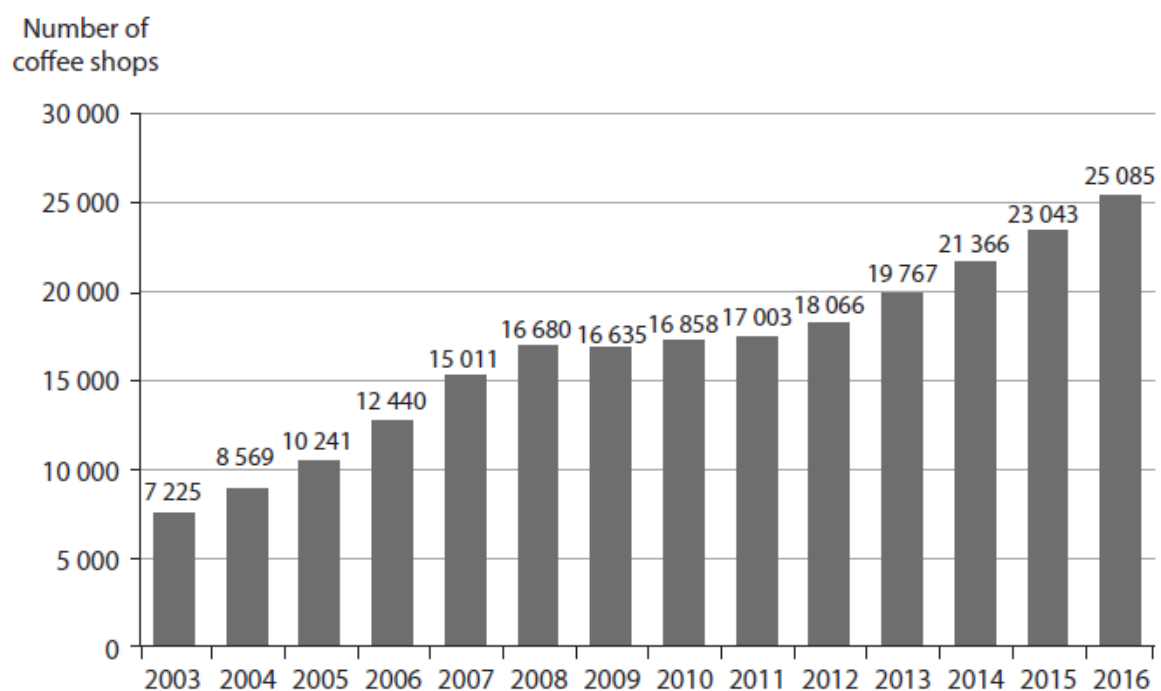
Branded coffee shops

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 15

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. 20

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. 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)

Q12.

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: 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.

5
10

(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)

Mark Scheme

Q1.

Question Number	Answer	Mark
(a)	A	(1)

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

Q2.

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

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

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

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

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

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

Q3.

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

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

Q4.

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

Question Number	Answer	Mark
(b)	A	(1)

Q5.

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

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

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

Q6.

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

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

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

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

Q7.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

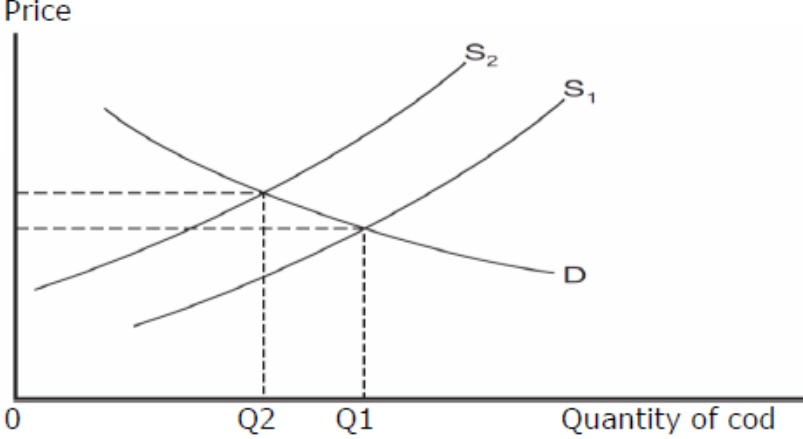
	- The diagram below shows the marginal private benefit (MPB) and marginal social benefit (MSB) curves and the marginal private cost (MPC) and marginal social cost (MSC) curves for higher education - The external benefits of education are social benefits that spillover to benefit others in the society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

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

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

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

Q8.

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

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

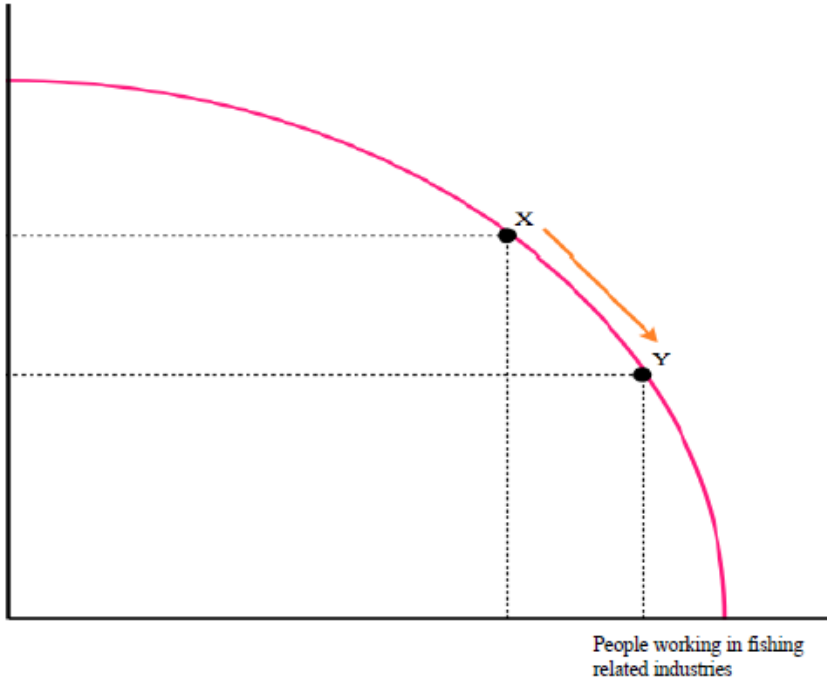
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level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

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

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

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

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

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

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

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

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

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

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

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

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

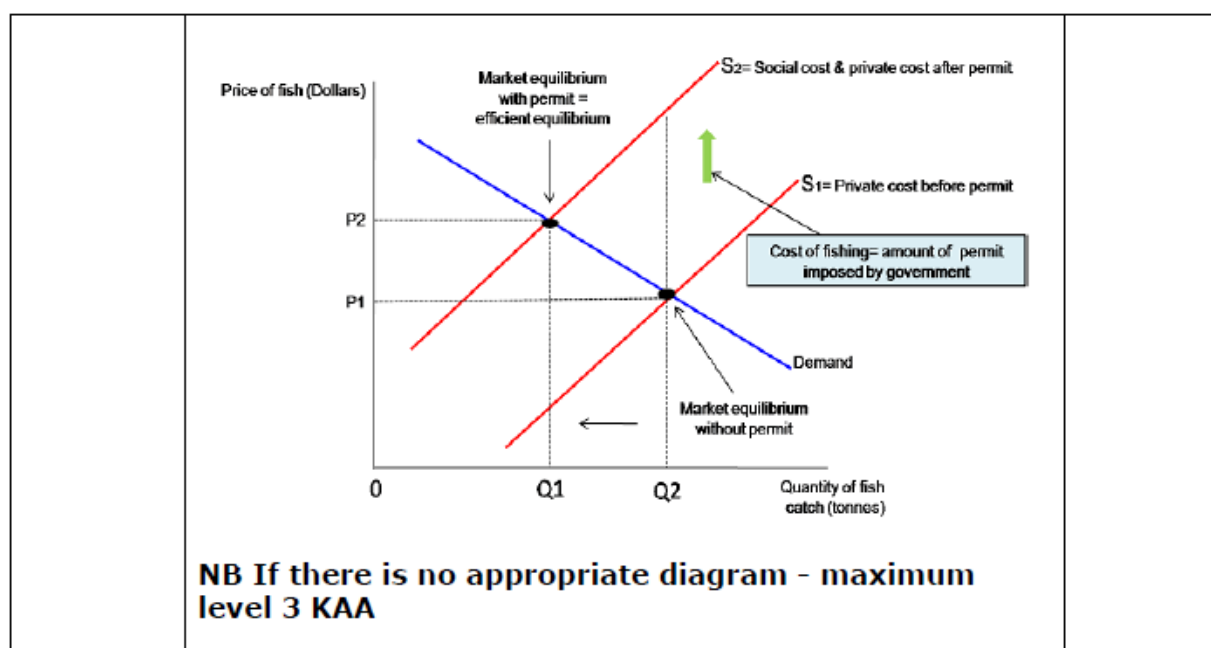
	on those swimming in the sea or wildlife, clear up for Environment Agency etc • Fishing industry throws any over catch back in to the sea, this can pollute the water • Smell from fishing industry can have a negative impact on those that live near the ports • Overfishing increases supply - lowers price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

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

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

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

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



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

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

Q9.

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

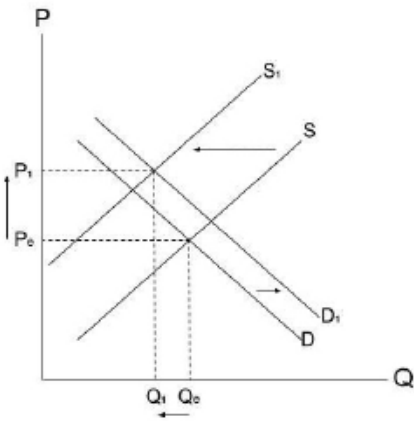
Question Number	Answer	Mark
(b)	Knowledge 2, Application 2, Analysis 2 Knowledge/understanding 2 marks for e.g. - producers know more than consumers (1) or the information is incomplete or imperfect (1) - misallocation of resources (1) Application 1+1 mark for e.g. - risk of requiring health care is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

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

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

Question Number	Indicative content	Mark
(c) continued	Evaluation 4 Reasons against being public good • Local authorities planning on charging parkrun participants using public parks • Public parks already have exclusive areas e.g. booking tennis courts or football pitches • Parks may be rivalrous in consumption e.g. Hundreds of park run participants may get in the way of other users. • Parks are also excludable because they already have exclusive areas, gates can be closed at certain times	(4)
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

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

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

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

Question Number	Indicative content	Mark
(e) continued	Evaluation 6 • Magnitude depends on how proportionately large the shift in demand or supply is as a key determinant • Price elasticity of demand may be more price elastic in the long run, given improvements in the NHS, discouraging further price increases • Price elasticity of supply may be relatively price inelastic, given health infrastructure, so price rise may be very significant • Other factors may reduce price e.g. government subsidies, productivity gains, healthier lifestyles.	(6)
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1-3	Identification of generic evaluative comments without supporting evidence/ reference to context. No evidence of a logical chain of reasoning.
Level 2	4-6	Evaluative comments supported by chains of reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question.

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

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

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

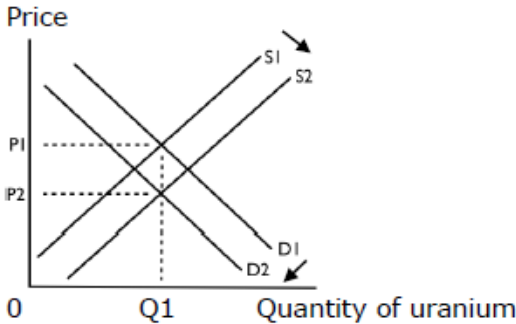
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated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

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

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

Question Number	Indicative content	Mark
(g) continued	Evaluation 6 Functions of the price mechanism to allocate resources in private health sector or NHS: • rationing • incentive • signalling • 'Private health care increases choice for users, encourages competition and drives up standards of care.' • Mixed economy acts as a compromise between the advantages and disadvantages of a free market economy and a command economy. • Mixed economy features disadvantages of both a free market economy and a command economy and has no advantages of either. • NHS is more efficient and offers better care than private sector so why allow private sector to exist. • NHS waiting lists and lack of choice. • Information failures.	(6)
Level	Mark	Descriptor
	0	No evaluative comments.
Level 1	1–2	Identification of generic evaluative comments without supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches which is unbalanced leading to unsubstantiated judgements. Evaluative comments with supporting evidence/reference to context and a partially developed chain of reasoning.
Level 3	5–6	Evaluative comments supported by relevant reasoning and appropriate reference to context. Evaluation is balanced and considers the broad elements of the question, leading to a substantiated judgement.

Q10.

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

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

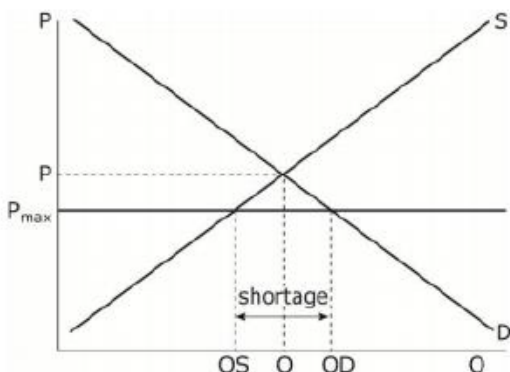
Level	Mark	Descriptor
	0	A completely inaccurate response.
Level 1	1–2	Displays isolated or imprecise knowledge and understanding of terms, concepts, theories and models. Use of generic or irrelevant information or examples. Descriptive approach which has no link between causes and consequences.
Level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

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

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

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

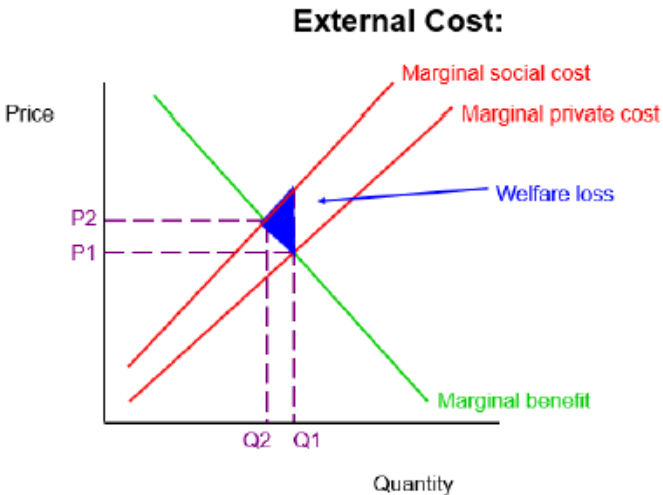
Question Number	Answer	Mark
(d)	Knowledge 2, Application 2 Knowledge/understanding 2 marks for e.g. Renewable energy is a resource made from something which can be renewed itself/infinite supply (1) Non-renewable energy is a resource which once exploited cannot be replaced/finite supply (1). Application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

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

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

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

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

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

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

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

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

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

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

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

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

Q11.

Question Number		Mark
(a)	Knowledge 2, Application 2, Analysis 1 Knowledge/understanding and analysis: Oligopoly (1) OR Legal monopoly (1) OR Monopoly only if monopoly POWER is implied e.g. using CR calculation (1) OR Duopoly only if duopoly POWER is implied e.g. using CR calculation (1) AND Understanding of market structure identified, e.g. a market <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)
--	---	-----

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 of Starbucks</i>.	(8)
--	---	-----

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

Question Number	Indicative content	Mark
(b) continued	Evaluation 4 • Weighing up of reasons for using price or non-price competition, e.g. • Not likely to use price competition - e.g. better to collude and keep higher joint profits. • Non-price competition can have very uncertain results/be expensive • Effects in the short run and long run might vary e.g. rising costs lead to falling profits, but long run demand rises leading to better results • Relative effectiveness of measures e.g. limit pricing may be static in long run and predatory pricing changes when other firms leave • Some of these strategies are illegal and could lead to fines, which might reduce overall profitability • Unstable nature of game theory equilibria • The effectiveness of the competition authorities might be considered e.g. regulatory capture • Depends on the strength of brand loyalty • Limitations of loyalty schemes, e.g. cost, consumer behaviour.	(4)

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

Question Number		Mark
(c)	Knowledge 2, Application 2, Analysis 2, Evaluation 2 Knowledge (1+1) e.g. • Fall in consumption of non-renewable products (1) • Rise in tax revenues (1) • Reduction in external costs/greater environmental awareness (1) • Soft touch regulation/allows consumer choice (1) Application (2 or 1+1) e.g. • Use of reusable cups as a means of reducing demand for disposable cups (i.e. a substitute, Extract C) (1) • Extract B – 5p charge is a small proportion of £2.60 (1) • 85% reduction in plastic bags (1) • This might be illustrated through the use of a correct supply curve shift, e.g. a fall in consumption or production of cups on x axis (1) Analysis (1+1) e.g. • Indirect taxes may raise prices (1) • Increases in costs of production (1) • Link between unit tax, tax revenue and reduction in demand for cups (1) • A supply and demand diagram showing an indirect tax (supply shift upwards/leftwards) or an externalities diagram might be used (1) • tax revenue could be used to subsidise other products, e.g. recyclable cups (1)	

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

Question Number	Indicative content	Mark
(d)	Knowledge 4, Application 4, Analysis 8, Evaluation 9 Microeconomic influences may include: • Level of demand or expected demand, prospect for profit • Cost of labour, minimum wage, spare capacity in the labour market • Rent/land prices • Contestability of market/barriers to entry e.g. how long and it takes and ease of setting up business • Legal system and other legislative issues • Property rights • Extent of regulation • Existing PED • Brand loyalty • Sunk costs Macroeconomic influences may include: • Levels of competitiveness e.g. price and non-price, which might relate to competitiveness ranking, e.g. infrastructure, human capital, institutions • Macroeconomic environment, e.g. inflation • Membership of EU or other trade bloc issues • Value of currency • Level of corporation tax. • Transfer pricing possibility, as outlined in Extract A, as impact on profitability (not costs) • Level/rate of national income/economic growth and spare capacity/unemployment • Growth of household incomes in different countries, e.g. Chinese coffee shops are the most profitable, growing quickly in number • Strength and stability of local economy • Political and social stability	

	NB competitiveness, corporation tax, incomes, unemployment and contestability can be seen as a micro or macro approach. • Possible evaluation points include: • Factors might balance each other out • Changes in tax rates, e.g. government cutting corporation tax significantly • Starbucks is starting to report UK profits – perhaps it has had too much negative publicity from the low profit tax paid, Extract A reduction by a third in sales at Starbucks. Also it is moving headquarters from Netherlands to UK • Different influences affect different firms	(25)
--	--	------

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

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

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

	NB environmental impacts, labour markets, taxation or incomes can be seen as a micro or macro approach. Evaluation points may include: • Extent of negative externalities depends on whether new processing plants for cups are set up/how alternatives are produced. • Depends on the extent of the increase in demand, PED, YED, XED – and if other areas are seeing declines. • Depends on the size of the multiplier • Depends on the level of spare capacity (LRAS for example) • Depends on growth levels, point at which AD and AS meet (if Keynesian approach) • Depends on the performance of other firms • Depends on the extent to which local shops are displaced • Depends on the extent to which substitution can occur – e.g. people drink coffee instead of going to pubs • Depends on degree of profit repatriation, remittances, transfer pricing • Depends on whether coffee shops extends consumption spending or replaces demand for something else which might have different benefits/costs	(25)
--	---	------

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

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

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)
--	---	-----

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)
--	--	-------------

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

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

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

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

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

Knowledge, application and analysis		
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.

