PEARSON EDEXCEL A-LEVEL ECONOMICS A · 9EC0

ECONOMICS



EXAM QUESTION PACK

1.3 MARKET FAILURE

SCORE	PERCENTAGE
/775	%

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 before you revise, because content and wording can change between series.

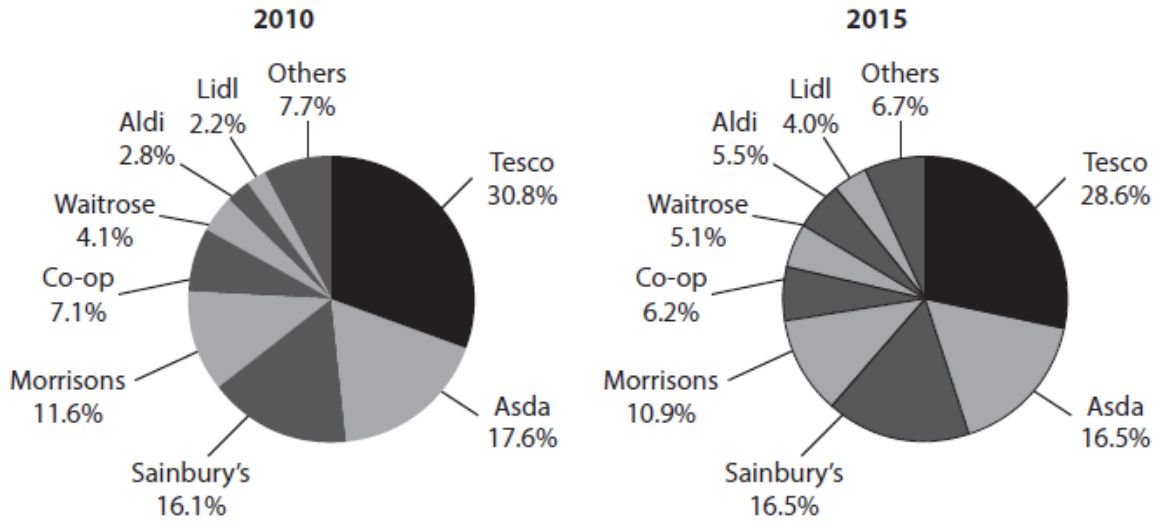
If you hold the rights to any material in this pack and would like it amended or removed, contact admin@stemup.co.uk and we will act on it.

Questions

Q1.

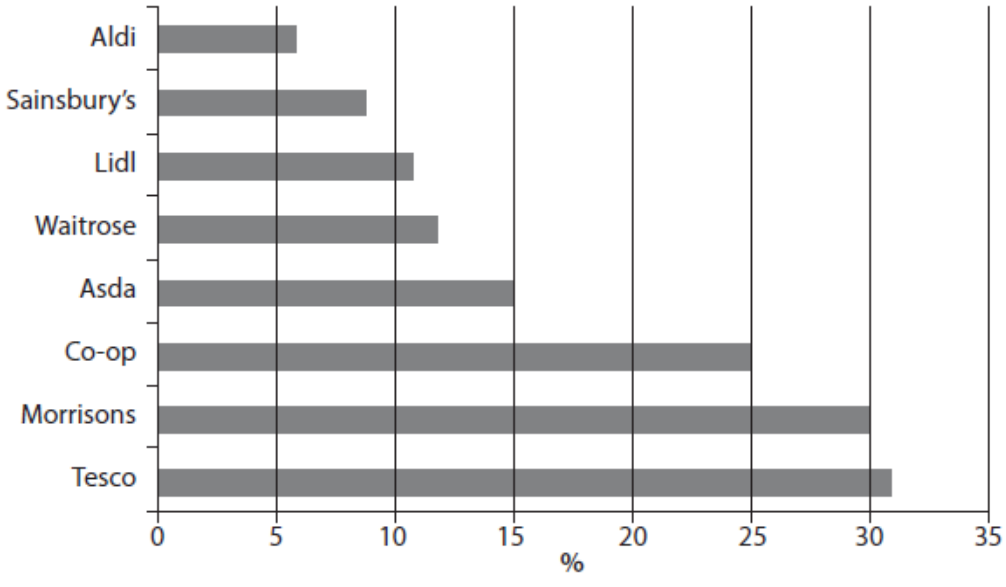
Supermarket price war, food waste and possible mergers

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.

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

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.

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.

(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.

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.

(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).

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.

(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



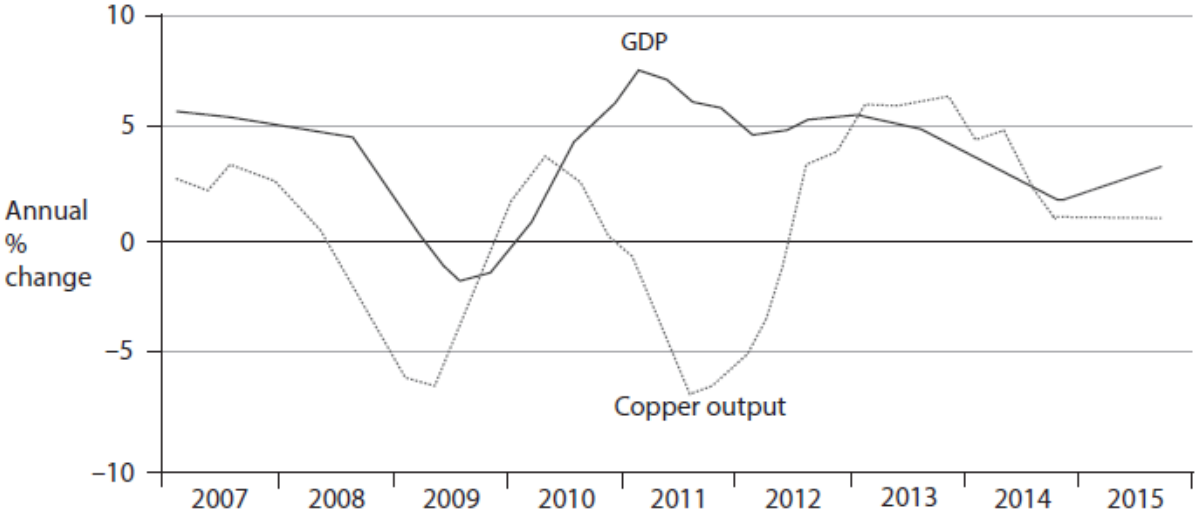
(Source: adapted from http://www.indexmundi.com/commodities/?commodity=copper&months=120)

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.

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.

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.

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.

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.

(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.

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.

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.

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.

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.

(Source: adapted from http://www.ft.com/cms/s/0/ea060ef4-6ae2-11e5-8171-ba1968cf791a.html#axzz3p20if45k 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.

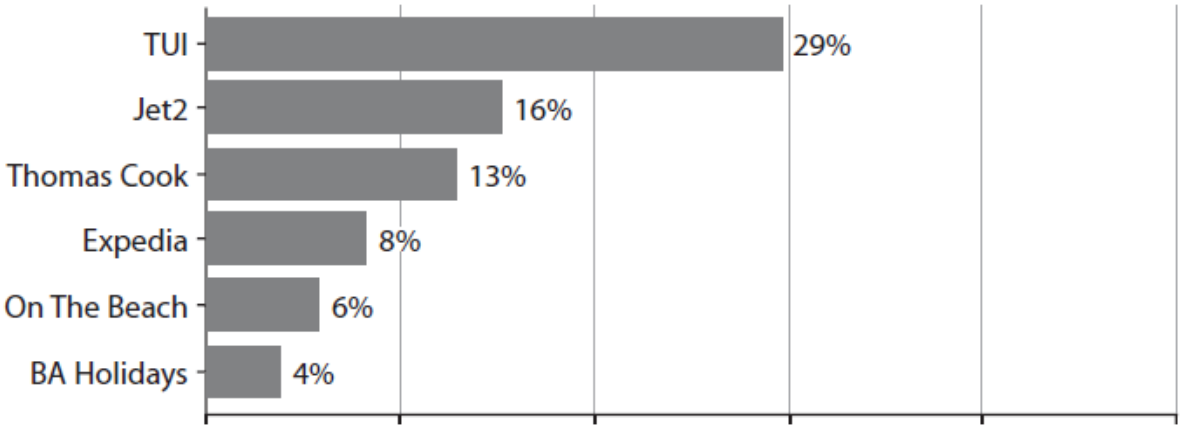
(Total for question = 25 marks)

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

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**

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 **£1,648** 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.

(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.

(Source adapted from: https://www.thomascookgroup.com/investors/insight_external_assest/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.

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.

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.

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.

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."

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".

(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)

.....

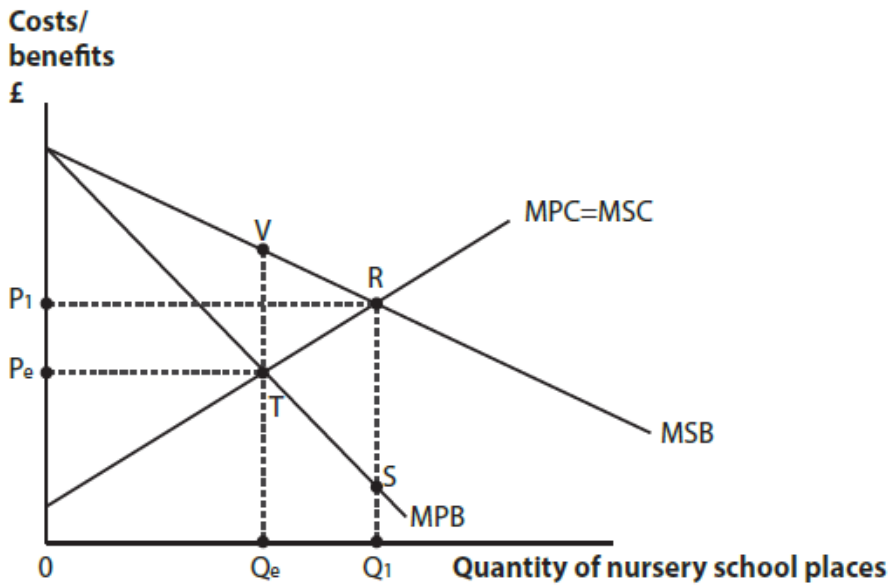
.....

.....

.....

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.

(Source adapted from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/701720/GLMS_2017.pdf)

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

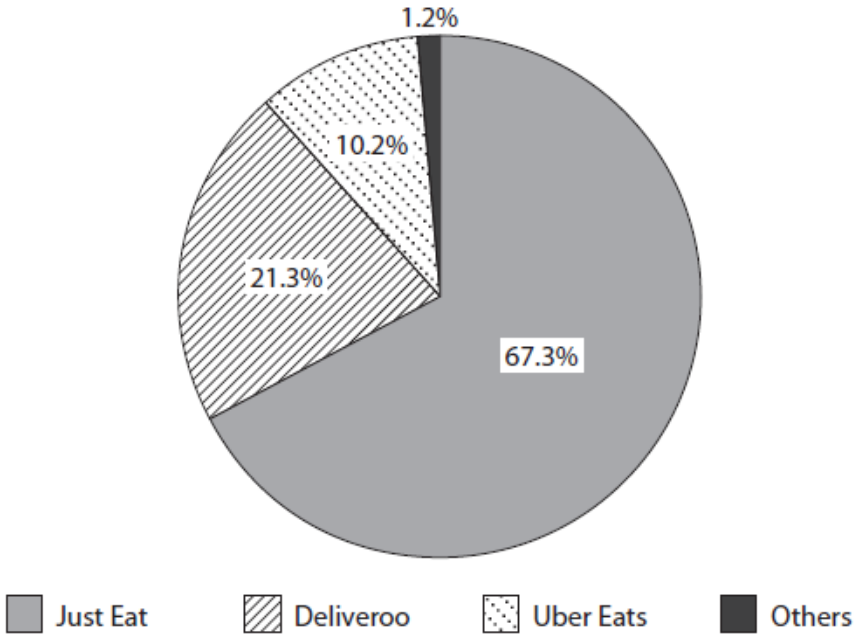
(Total for question = 5 marks)

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.

(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.

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.

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.

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.

(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.

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

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.

(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)

.....

.....

.....

.....

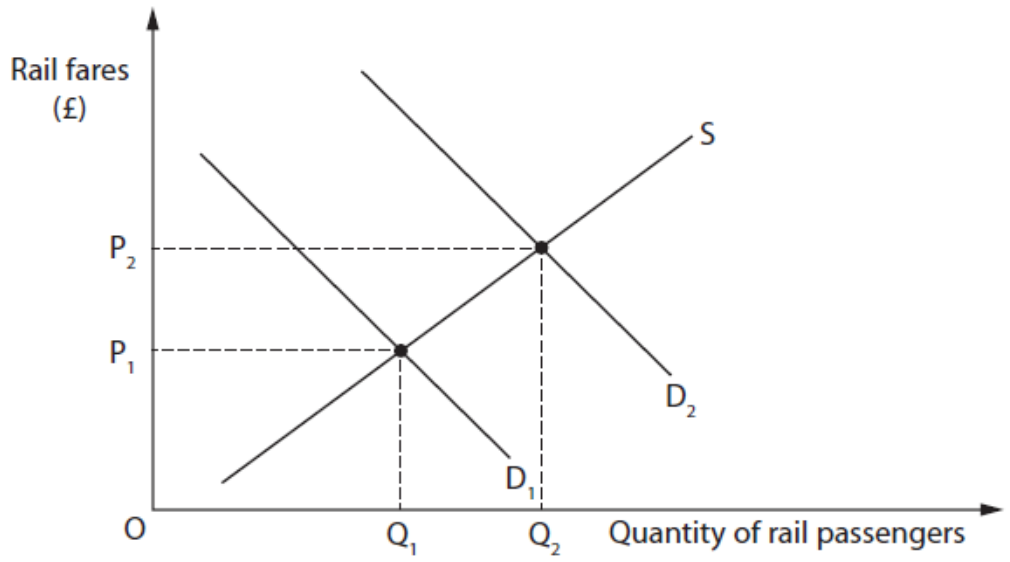
.....

.....

.....

.....

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



The shift of the demand curve from D1 to D2 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

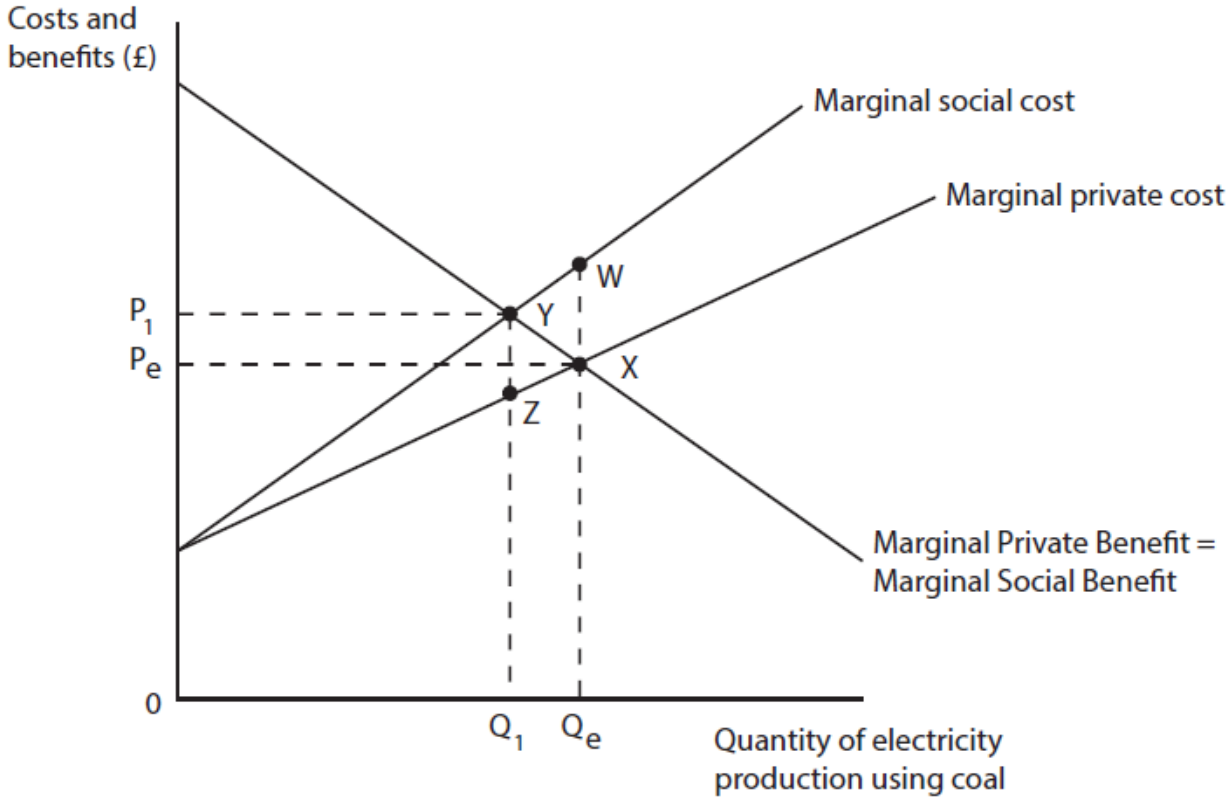
☒ **D** reduction in the tax imposed on a litre of petrol

(Total for question = 4 marks)

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)

.....

.....

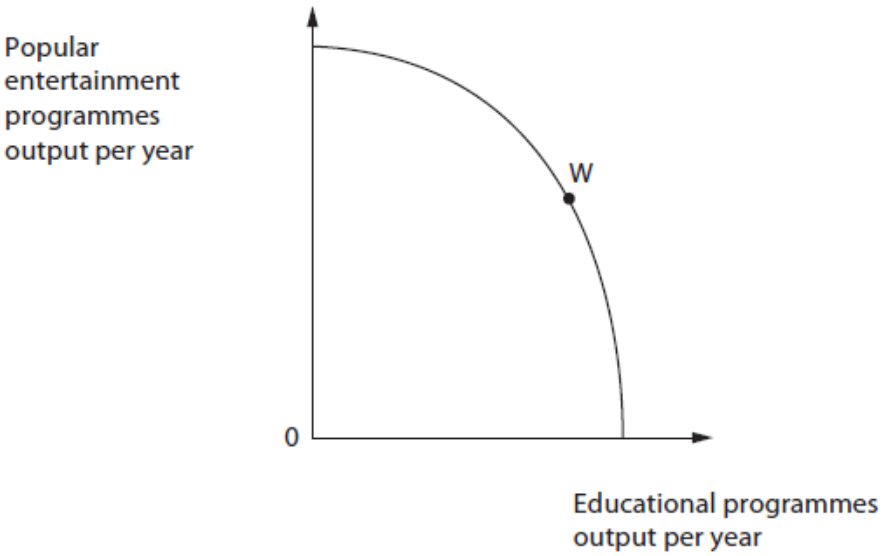
.....

.....

.....

(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.

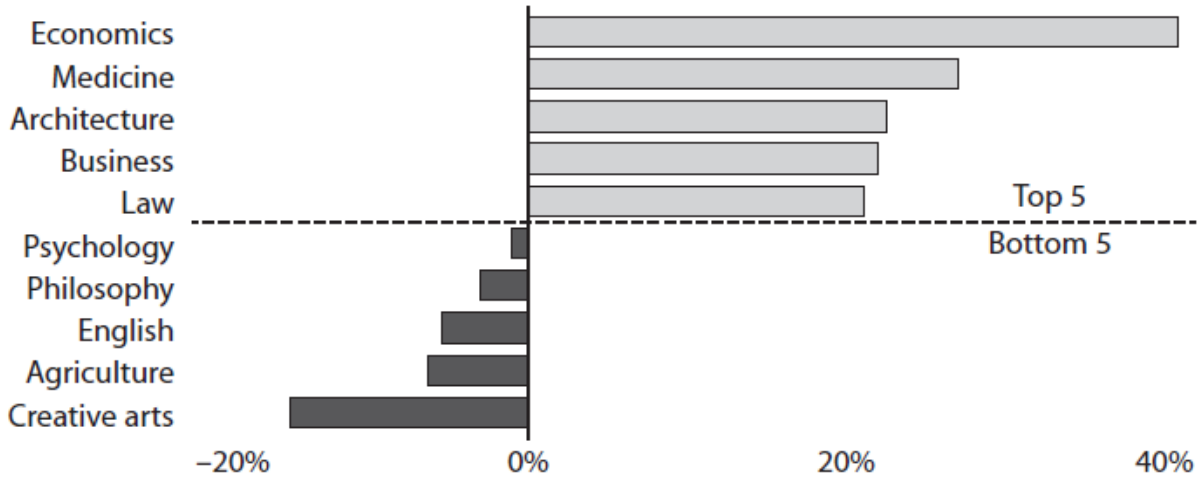
(Total for question = 25 marks)

Q7.

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

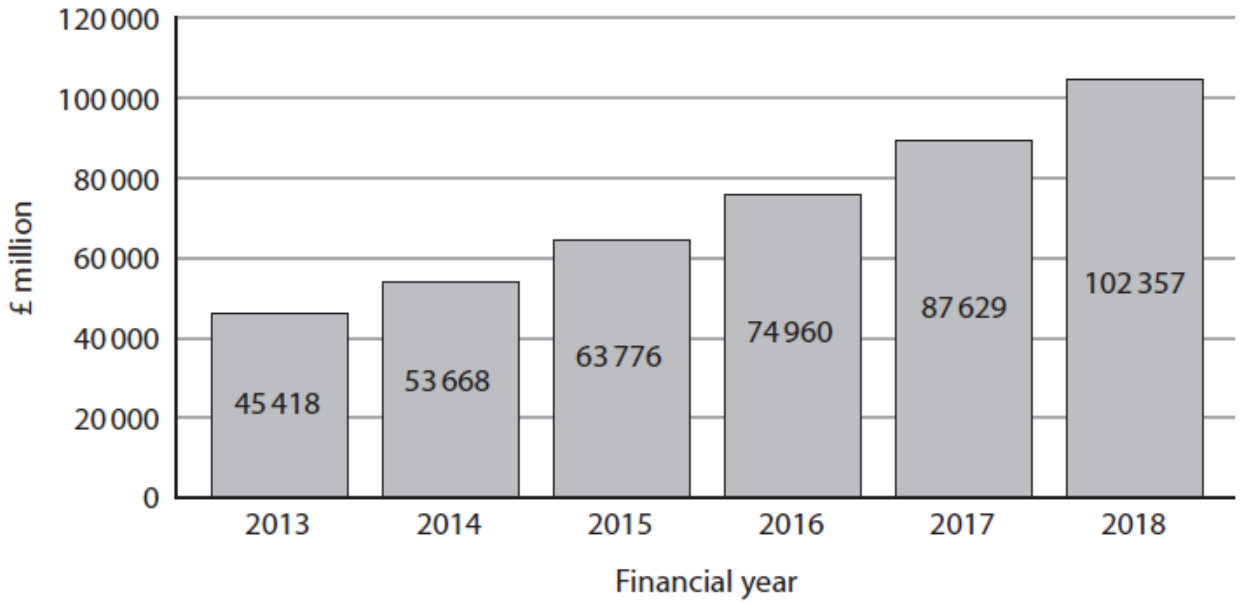
The market for higher education in the UK

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



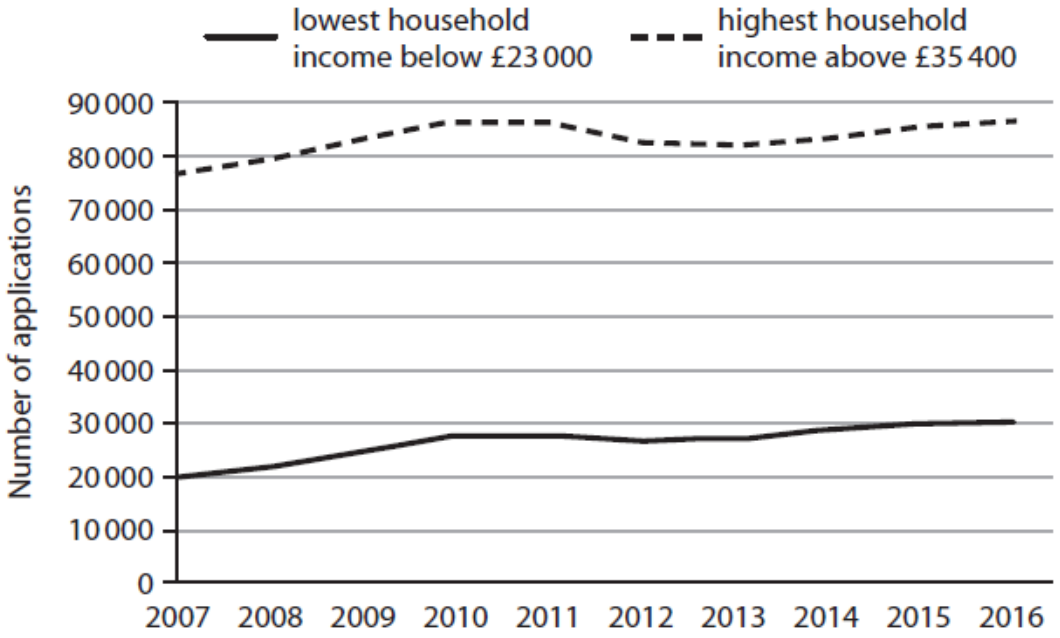
(Source: adapted from https://www.ifs.org.uk/publications/13731
The impact of undergraduate degrees on early-career earnings, Research report, November 2018)

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.

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.

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.

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.

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.

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.

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.

(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.

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.

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.'

(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%.

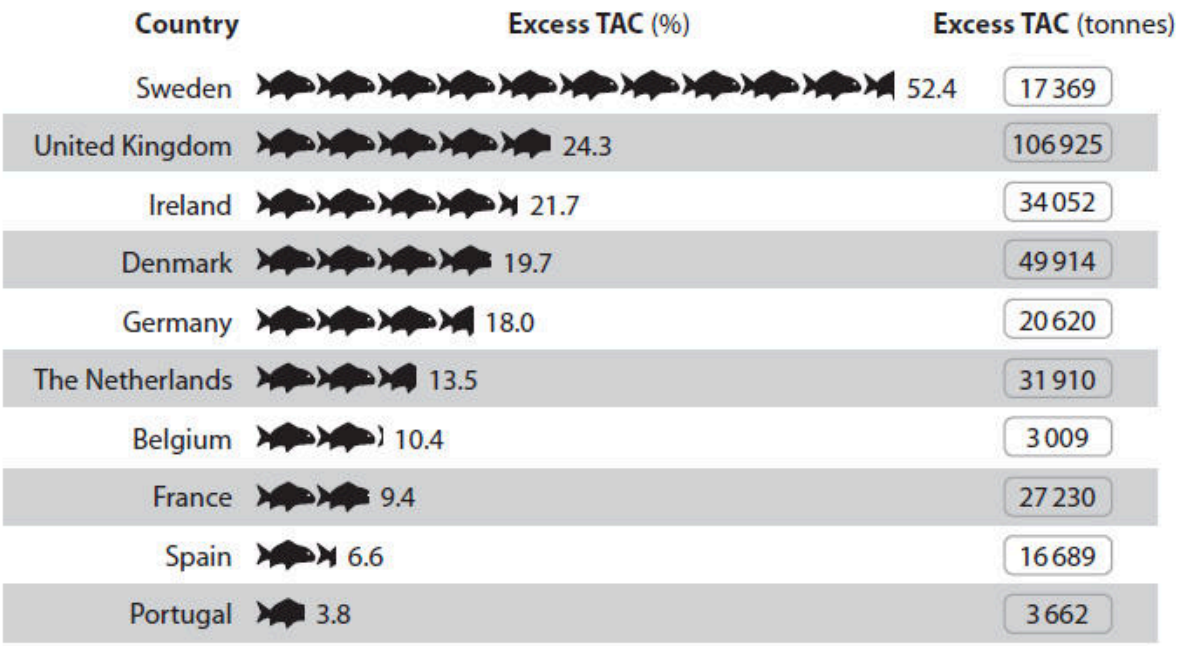
UK Fisheries Minister George Eustice said: "This year there has been mounting scientific evidence suggesting that cod is being overfished in many parts of the northeast Atlantic and we have responded to conserve stocks".

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'.

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.

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.

(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.

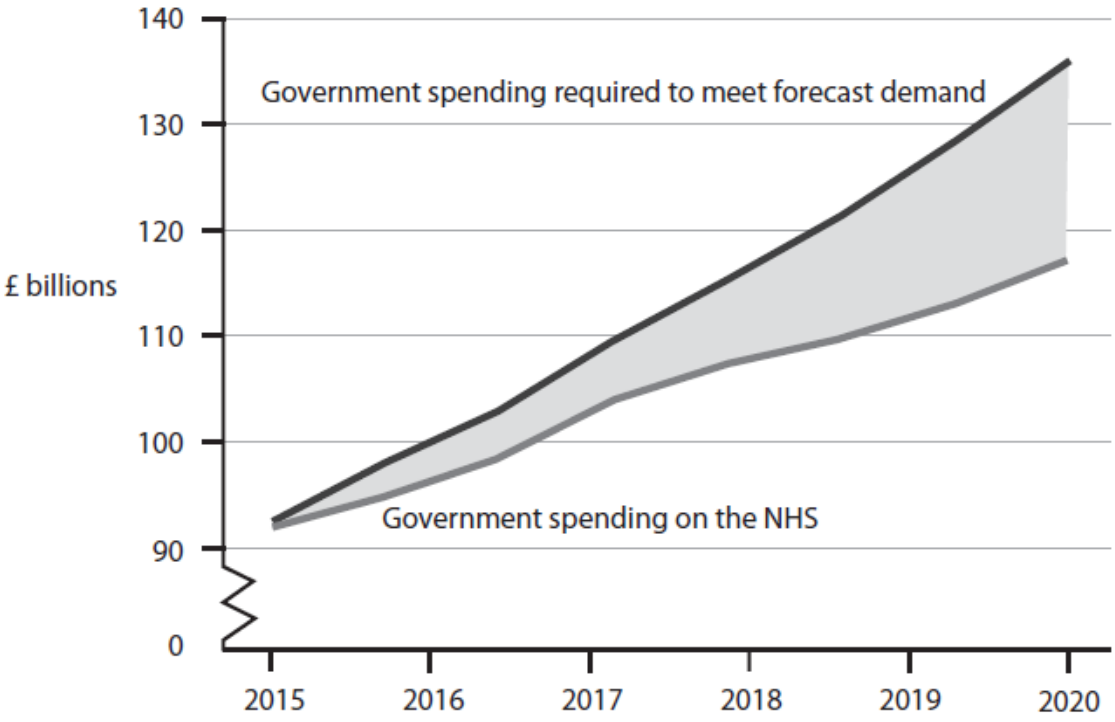
(20)

(Total for question = 60 marks)

Q9.

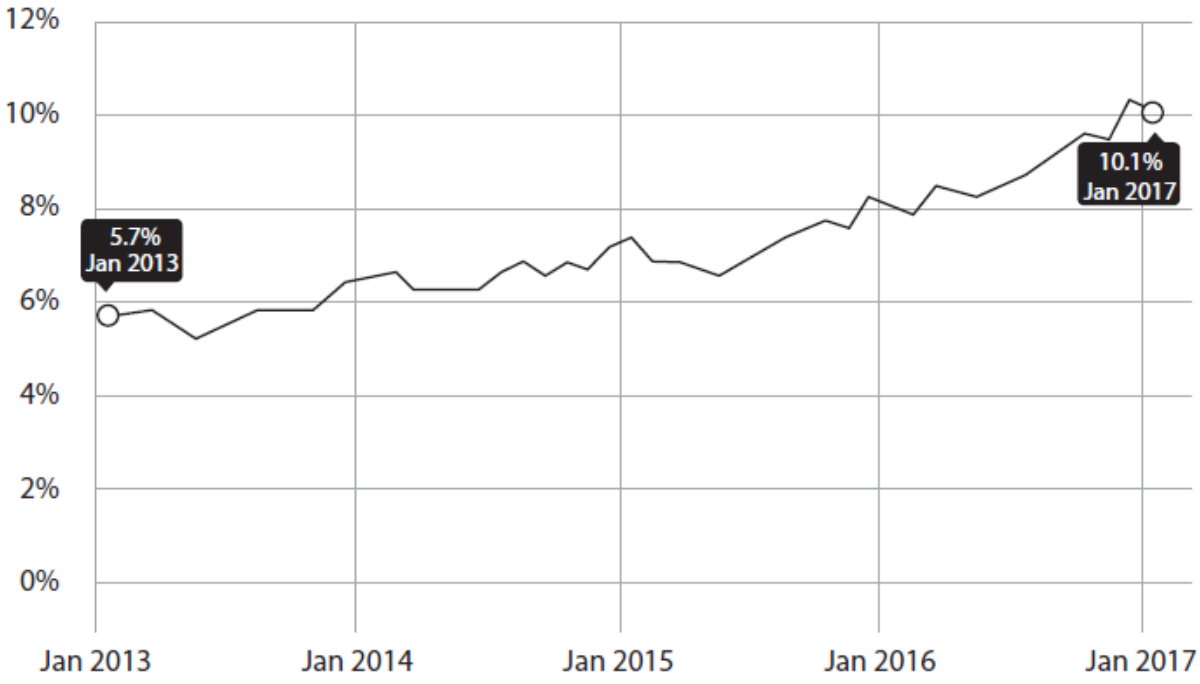
Health provision

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



(Source: https://www.economist.com/news/britain/21706563-nhs-mess-reformers-believe-new-models-health-care-many-pioneered)

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.

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.

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.

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.

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.

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.

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.

(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.

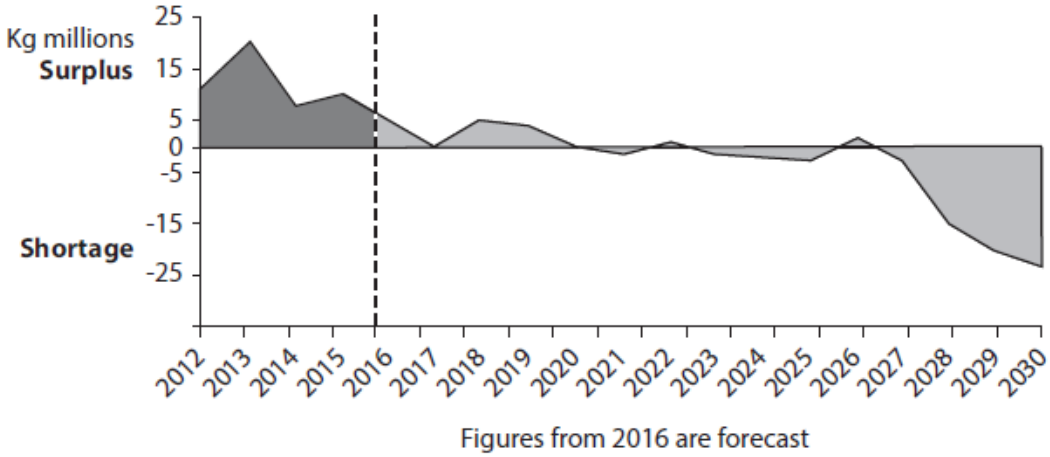
(20)

(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.

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.

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.

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.

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.

(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-radioactiv/)

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.

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.

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.

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.

(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.

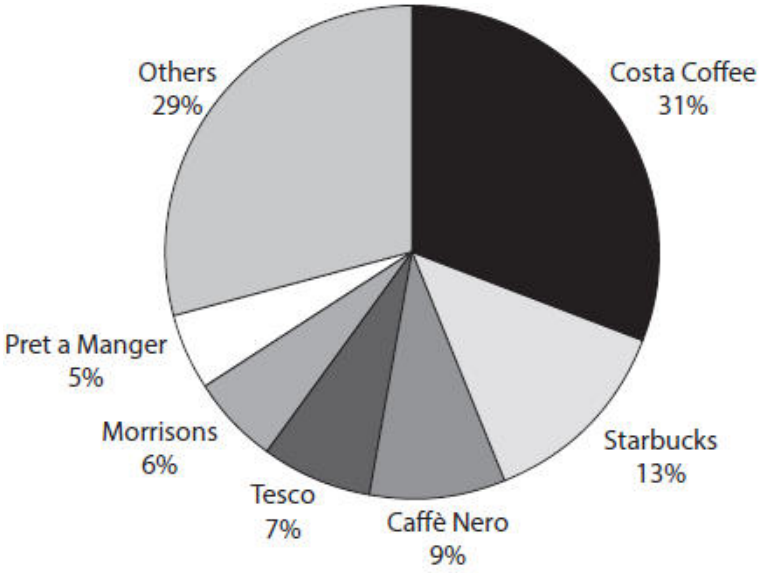
(20)

(Total for question = 60 marks)

Q11.

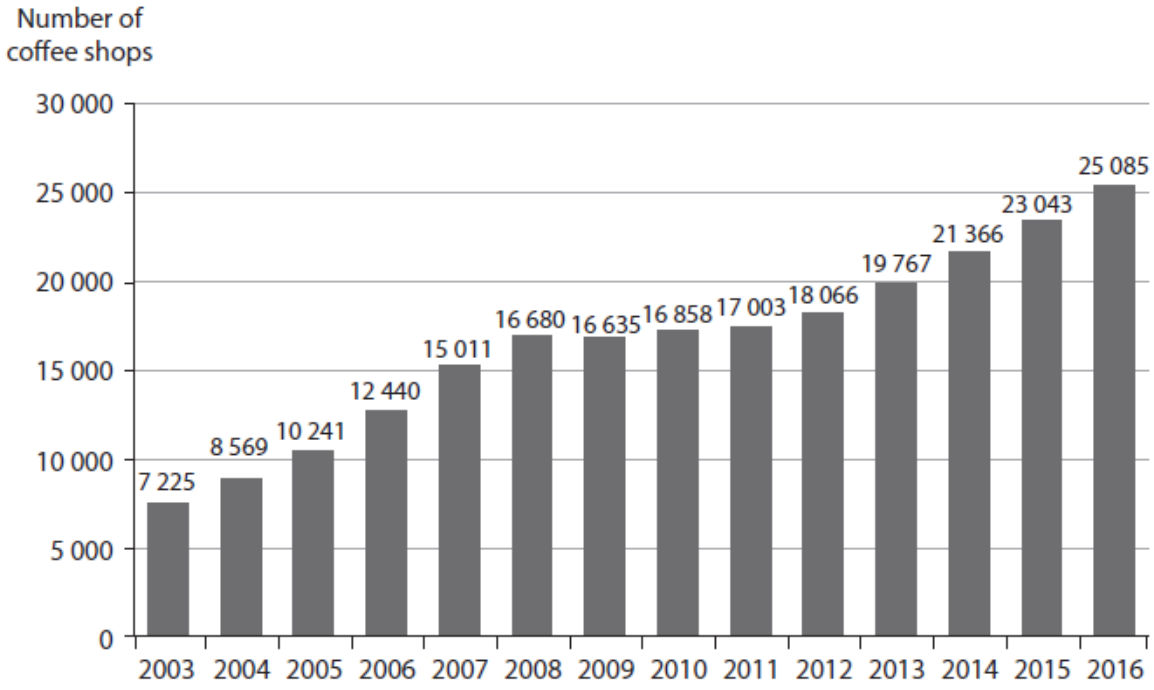
Branded coffee shops

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.

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.

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.

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.

(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."

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."

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.

(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.

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.

(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%*		
	of which: *Regular Standard*	35 g		28.1%	0.45
	Regular Max	50 g		7.4%	0.63
	Sensations	40 g		2.0%	0.59
	Doritos	40 g		4.7%	0.45
	Other			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.

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.

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.

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.

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.

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

Extract C

Tax on fatty foods in Denmark is an economic disaster

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

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

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

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

(5)

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

(8)

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

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

(12)

EITHER

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

(25)

OR

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

(25)

(Total for question = 50 marks)